Roland

FR-4x

V-Accordion

Reference Manual

Contents

Introduction

The Sections of Your FR-4x

Right Hand Section

This section is normally used for playing the melody.

The FR-4x's right hand keyboard is velocity sensitive.

Right Hand Registers

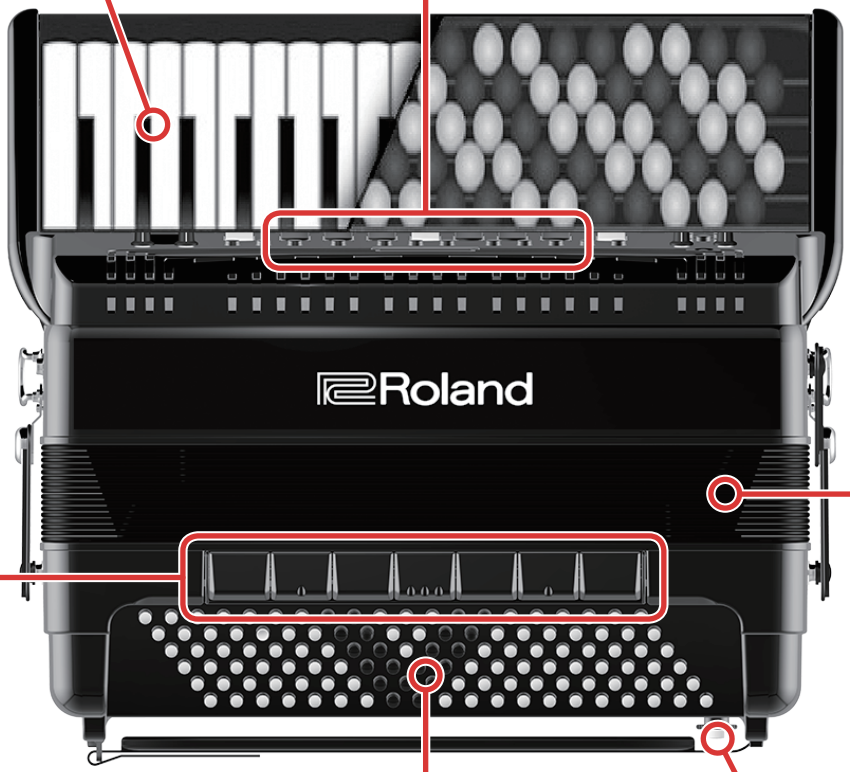
This section contains the registers for the right hand and other selectors

Bellows

The movement of the bellows indeed lends expression and dynamics to the sound.

Several techniques are available, one of which is called **"bellows shake"** (rapid opening and closing movements).

You can adjust the resistance of the bellows, and adjust the air button to specify the inertia of the bellows (the force required to open and close the bellows).



Left Hand Registers

This section contains seven registers for the left hand.

Left Hand Bass and chord section

This section is normally used to play the accompaniment.

There are two general categories: one is called **"Stradella,"** and the other **"Free Bass."**

In Bass & Chord mode, the first two or three rows of buttons are used to play bass and the remaining buttons are used to play chords.

If you select the **"Free Bass"** system, the first two rows of buttons are used to play bass and the remaining buttons are used to play melodies using the free bass button layout.

The FR-4x's bass and chord section is velocity sensitive.

Air Button

The air button operates a valve that allows the bellows to open and close without the accordion making any sound.

Set and User Program

Set

A **"set"** is analogous to a single accordion.

Switching sets is analogous to putting down one accordion and picking up a different one.

When you do so, the right hand register buttons and left hand register buttons operate to change registers (change the combination of reeds) as on an acoustic instrument.

When you want to switch sounds, you can use this as if you were playing an acoustic accordion.

For details, **"Using Sets"** (p. 33).

User Program

The selected register is maintained even when you change sets; however for user programs, the register number of each selected part and the on/off status of the part can also be remembered.

User programs are convenient to use during a live performance, since they let you instantly switch settings that would otherwise require multiple button presses to specify, such as changing sets or registers.

For details, **"Working with User Programs"** (p. 39).

Sets and user programs are similar in that they contain sound settings, but because there are several differences in the contents of the settings that can be stored, there are differences in what happens when you press a register button.

You can use either sets or user programs as appropriate for your needs.

Saved parameters

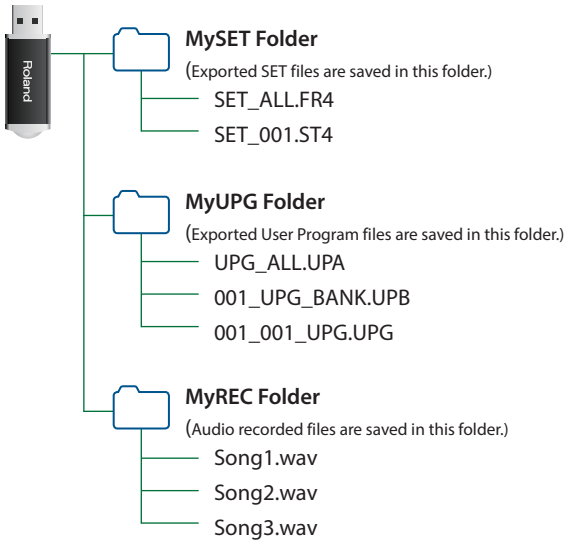
Parameter	Set	User Program
SetComon (Set Common) parameters (p. 70)	✓	✓
Accordion parameters (p. 45)	✓	✓
Bass parameters (p. 49)	✓	✓
Free Bass parameters (p. 51)	✓	✓
Orchestra/Organ parameters (p. 53, p. 56)	✓	✓
Orchestra Bass parameters (p. 57)	✓	✓
Orchestra Chord parameters (p. 60)	✓	✓
Orchestra Free Bass parameters (p. 63)	✓	✓
Drum parameters (p. 66)	✓	✓
Right Hand Mode parameters (p. 69)	✓	✓
• Current part of the left hand part (*) • Current part of the right hand part (*) • On/off status of the left hand part • On/off status of the right hand part • Register number selected for each part • Name of the user program • Link to the user program's audio file • Volume of the audio file • Scale tuning setting • Transpose setting • Bass To Treble on/off • Right hand octave setting	—	✓

* A part whose register changes when you press a register button.

The Folder Structure of a USB Flash Drive

Sets and user programs can be exported as a backup file to the MySET folder or MyUPG folder of your USB flash drive.

Audio-recorded WAV files are saved in the MyREC folder of the USB flash drive.



Overall Structure of the Memory

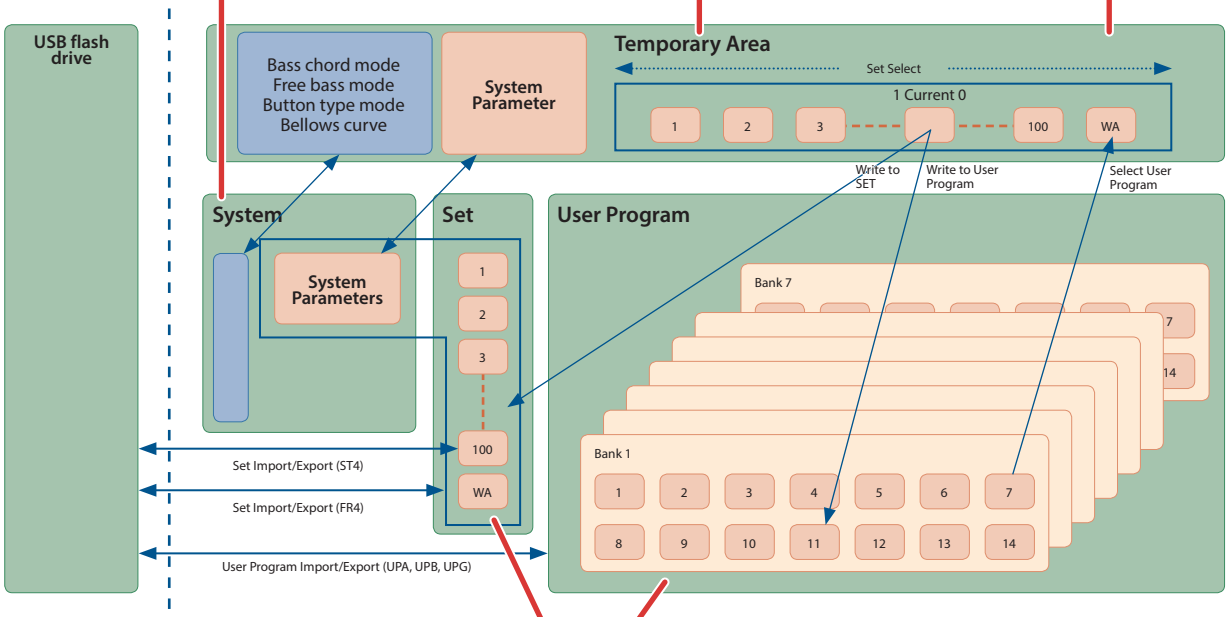
Separately from sets and user programs, there is a block called **"system parameters"**; here you can make settings that affect the entire FR-4x.

When you start the FR-4x, the system parameters are loaded into the temporary area and its settings are applied.

The settings of the temporary area can be edited on the FR-4x itself.

However, because the temporary area is a kind of memory that is not preserved when you turn off the power, you'll need to use the WRITE operation to save these settings if you want to keep them after the power is off.

The selected user program is loaded into the WA (Working Area) of the set, and its settings are applied.

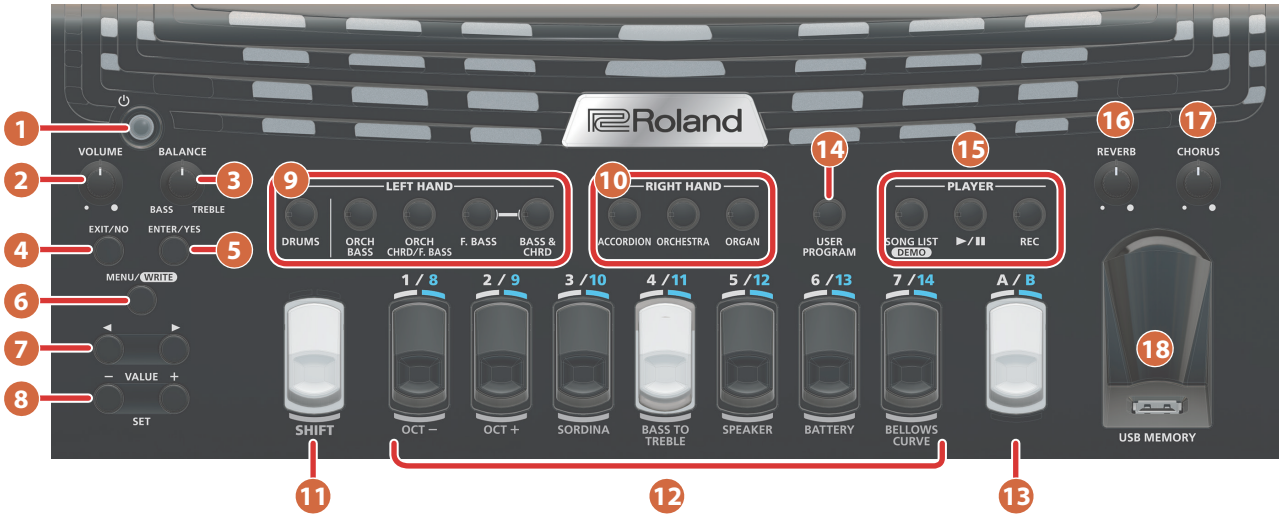


Most of the FR-4x's sound settings are managed in blocks called **"sets"** or **"user programs."**

When the FR-4x starts, all sets are loaded into the temporary area.

Panel Descriptions

Right Hand Control Panel



1 [⏻] (power) button

Turns the power on/off (p. 15).

MEMO

If you need to turn off the power completely (when using the supplied AC adaptor), first turn off the [⏻] button, then disconnect the AC adaptor's plug from the wall outlet.

- With the factory settings FR-4x's power will automatically be switched off 240 minutes after you stop playing or operating the FR-4x.

  If FR-4x's power has been turned off automatically, you can use the [⏻] button to turn the FR-4x back on.

  If you don't want the power to turn off automatically, set the **"Auto Off"**parameter to **"OFF"** (p. 74).

NOTE

Be aware that any unsaved changes are lost when the FR-4x is switched off by that function.

2 [VOLUME] knob

Adjust the FR-4x's overall volume.

3 [BALANCE] knob

This knob allows you to set the balance between the right hand and the left hand sections.

4 [EXIT/NO] button

The **[EXIT/NO]** button allows you to return to the main page.

In the menu screen, press this once to return to the screen of the next-higher level.

If you hold down this button in the menu screen, you'll return directly to the main screen.

In screens that ask for confirmation, press this to respond NO.

5 [ENTER/YES] button

In the menu screen, where only the parameter name and not the value is shown, press this to enter a lower level.

In screens that ask for confirmation, press this to respond YES.

6 [MENU (WRITE)] button

Access the MENU screen.

This button allows you to select the FR-4x's MENU environment where you can set and view all available functions (p. 44).

By holding down **[MENU/WRITE]**, you activate the WRITE function, which allows you to save your User Program, Set and Settings.

7 [◄] [►] buttons

In the main screen, use this to switch the sound selection screen of each part.

In the menu screen, use this to select parameters.

8 [–] [+] buttons

In the MENU screen, these change the value.

Hold down a button to change the value continuously.

To rapidly raise the value, hold down the **[+]** button and press the **[–]** button.

To rapidly reduce the value, hold down the **[–]** button and press the **[+]** button.

By holding down **[SHIFT]** and pressing **[–] [+]** you can change the value in increments of 10 times the usual increment.

In the main screen, these change the SET.

9 LEFT HAND section

These buttons allow to switch On/Off the parts controlled in the left hand:

DRUM, ORCH BASS, ORCH CHRD/F.BASS, FBASS, BASS & CHORD

10 RIGHT HAND section

These buttons allow to switch On/Off the parts controlled in the right hand:

ACCORDION, ORCHESTRA, ORGAN

11 [SHIFT] button

By using this in conjunction with other buttons you can access alternate functions for those buttons.

➡ **"List of Shortcut Keys"** (p. 105)

12 Right hand registers

The 7 right hand registers allow you to select the desired sound.

NOTE

If you hold down a right hand register button, the selected part is muted, so that playing the keyboard does not produce sound (keyboard data is transmitted only via MIDI).

When you once again press the right hand register button, muting is cancelled.

13 [A/B] button

This switches the right-hand register buttons [1/8]–[7/14], specifying whether they act as group [1]–[7] or [8]–[14].

The "A:1-7/B:8-14" indicator in the display indicates whether the right-hand buttons act as [1]–[7] (unlit) or as [8]–[14] (lit).

14 [USER PROGRAM] button

Turns the user program mode on/off.

If this is on, you can use the right-hand register buttons to recall user programs.

15 PLAYER section

Button	Explanation
[SONG LIST] button	Press this to move to a screen where you can select audio files that are saved on a USB flash drive.
[►/II] button	The [Play/Pause] button allows you to start or temporary stop (pause) the song playback. For details, refer to p. 37.
[REC] button	The [REC] button is used to start audio recording of your performance. For details, refer to p. 37.

16 [REVERB] knob

Use this knob to set the level of the reverb effect.

17 [CHORUS] knob

Use this knob to set the level of the chorus effect.

18 USB MEMORY port

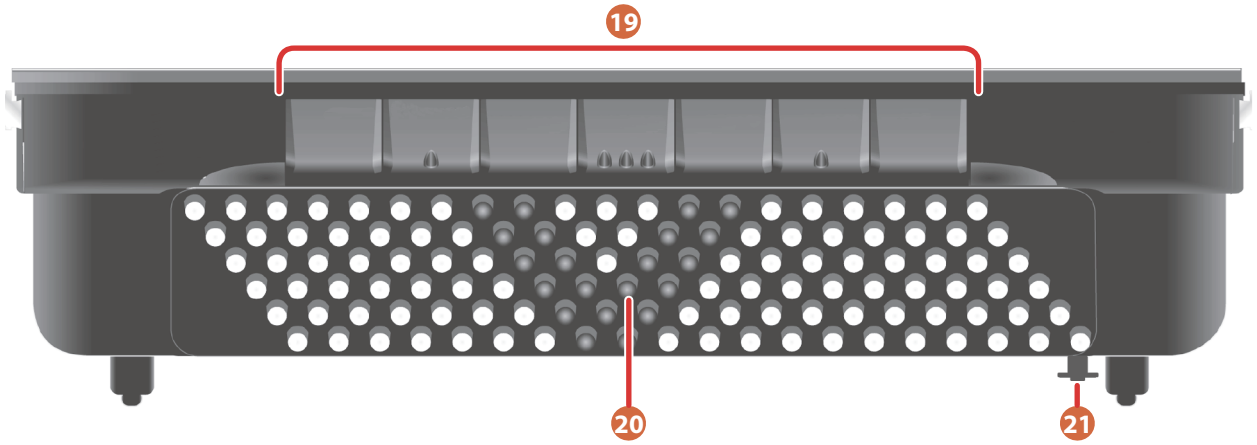
Connect an optional USB flash drive (sold separately) here.

NOTE

Carefully insert the USB flash drives all the way in—until it is firmly in place.

Use a commercially available USB flash drive or a USB flash drive sold by Roland. However, we cannot guarantee that all commercially available USB flash drives will operate correctly.

Left Hand Control Panel



19 Left hand registers

The 7 left hand registers allow you to select the desired sound.

20 Bass and chord buttons

These 120 buttons are used to play bass notes and chords They are velocity-sensitive).

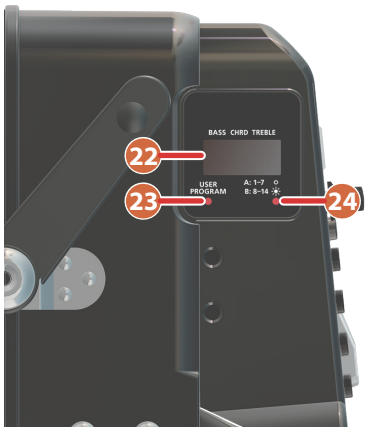
They also allow you to play drum sounds.

21 Bellows resistance regulator and air button

The air button operates a valve that allows the bellows to open and close without the accordion making any sound.

By pressing it you can purge the air that still remains in the bellows after playing.

Display



22 Display

This display shows information related to your operation (p. 18).

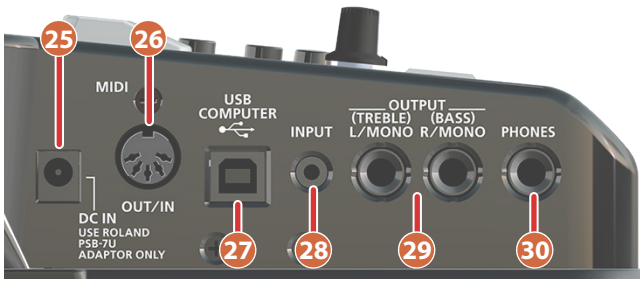
23 "USER PROGRAM" indicator

This is lit in user program mode.

24 "A:1-7/B:8-14" indicator

This is unlit if a bank A sound is selected for the right-hand register buttons, and lit if a bank B sound is selected. Use the **[A/B]** button to switch between banks A and B.

Connection Panel



25 DC IN jack

This is where you need to connect the supplied power adapter (p. 10).

That you can also purchase 10 rechargeable AA-type Ni-MH batteries and use the FR-4x without the adapter.

26 MIDI OUT/IN connector

This connector can transmit or receive MIDI messages.

You can select either transmit mode or receive mode for this connector (p. 82).

27 USB COMPUTER port

This port can be connected to one of your computer's USB ports (p. 13).

Please use a commercially available USB cable.

28 INPUT jack

Connect this to an external audio player or similar device.

29 OUTPUT L/MONO (TREBLE) jack, R/MONO (BASS) jack

These jacks can be connected to an amplifier, a mixing console or a commercially available wireless system.

If you use both jacks, the FR-4x's output is stereo.

In that case the signals of the Treble section are transmitted to the L/MONO jack, while the R/MONO jack transmits the left hand section signal.

If you only use one jack (connected to the **"L"** or **"R"** jack), the FR-4x's output is mono.

MEMO

Using these jacks and switching off the FR-4x's speakers allows you to save battery power.

➡ **"Speakers"** (p. 74)

NOTE

With the factory settings, the sound of the left and right parts is not completely separated; a small amount of sound comes from the opposite-side plug. If you want the left and right parts to be completely separated between the two jacks, set the system setting **"StereoWd (Stereo Width)"** (p. 74) to **"WIDE,"** and turn the **[REVERB]** knob and **[CHORUS]** knob all the way down.

30 PHONES jack

This is where you can connect optional stereo headphones.

NOTE

Connecting a pair of headphones mutes the internal speakers.

If you want to use the FR-4x internal speakers also while a pair of headphones is connected, set the parameter **"Speakers"** (p. 74) appropriately.

Battery Compartment

31 Battery compartment

This is where you install 10 commercially available rechargeable AA-type Ni-MH batteries (p. 10).

Connecting the AC Adaptor

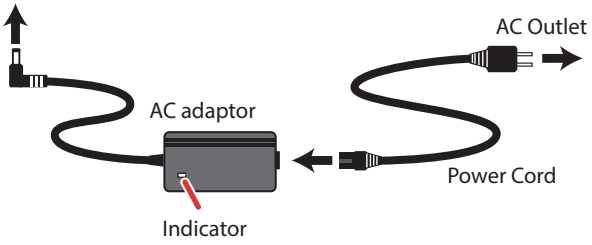
* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
* We recommend that you keep batteries installed in the unit even though you'll be powering it with the AC adaptor. That way, you'll be able to continue a performance even if the cord of the AC adaptor gets accidently disconnected from the unit.

1. Turn the [VOLUME] knob all the way to the left to minimize the volume.

2. Connect the included power cord to the AC adaptor.

* Place the AC adaptor so the side with the indicator (see illustration) faces upwards and the side with textual information faces downwards.

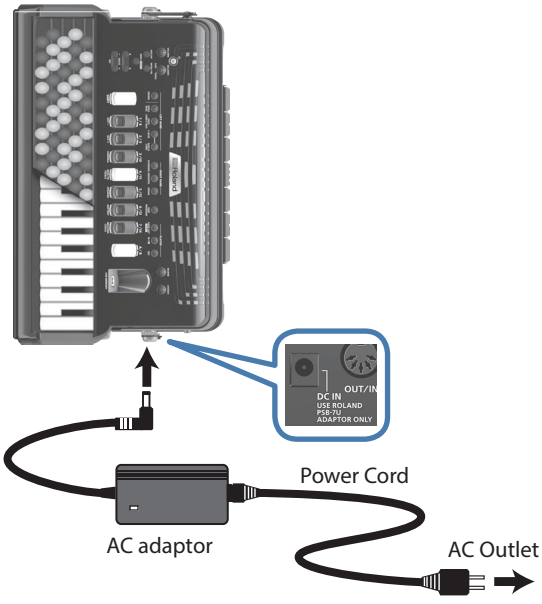
  The indicator will light when you plug the AC adaptor into an AC outlet.



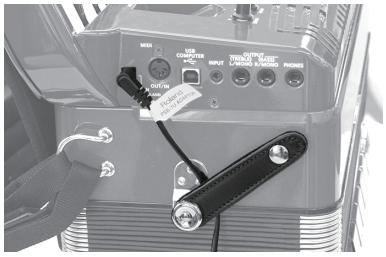
NOTE

Be sure to use the AC adaptor supplied with the unit (PSB-7U).

3. Connect the AC adaptor to the FR-4x's DC IN jack.



4. Use the bellows clip to secure the cord of the AC adaptor.



* To prevent the inadvertent disruption of power to your unit (should the plug be pulled out accidentally), and to avoid applying undue stress to the jack, anchor the power cord using the bellows clip, as shown in the illustration.

5. Plug the power cord into a power outlet.

To use the FR-4x with batteries, see**"Installing Batteries"** (p. 10).

Installing Batteries

If you install ten AA rechargeable Ni-MH batteries , you'll be able to perform without connecting the AC adaptor. By using the FR-4x with its built-in speaker on battery power, you can play it like an acoustic accordion without connecting a cable.

About the batteries that can be used

- When using rechargeable Ni-MH batteries (2000 mAh batteries), you can use the instrument for approximately five hours if the speaker is on, or approximately nine hours if the speaker is off (operating time depends on the conditions of use).
- When the batteries run low, the display indicates **"Battery Low!!"**

NOTE

Do not use alkaline batteries or zinc-carbon batteries.

About battery handling

Improper handling of batteries, rechargeable batteries, or chargers can cause hazards such as electrolyte leakage, overheating, ignition, or bursting.

Before use, you must read and observe all of the cautions included with the batteries, rechargeable batteries, or charger, and use them as directed.

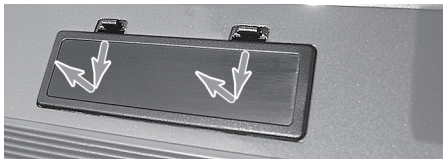
* Rechargeable batteries and chargers must be used only in the combination of rechargeable battery and charger that is specified by the manufacturer.

* Power-off the FR-4x when installing or removing batteries.

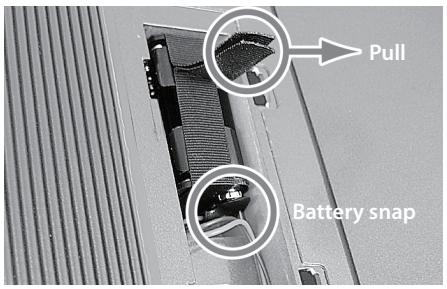
1. Remove the cushion from the back of the FR-4x.

2. Remove the battery case cover.

While pressing downward on the two knobs of the cover, pull it toward yourself.



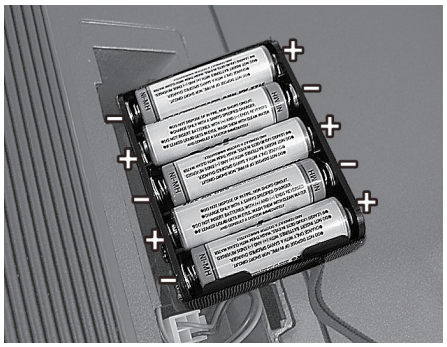
3. Pull the end of the belt that is wrapped around the battery holder, and remove the battery holder from the battery case.



4. Remove the battery snap of the cord from the battery holder.

5. Insert ten rechargeable Ni-MH batteries into the battery holder.

Insert each battery correctly in accordance with the **"+" "-"** polarity markings.



6. Connect the battery snap to the battery holder.

7. Insert the battery holder into the FR-4x's battery case.

8. Attach the battery case cover, and attach the cushion.

* The batteries will not be charged even if you connect the AC adaptor when rechargeable batteries are installed in the FR-4x. You must use a commercially available charger to charge rechargeable batteries.

Connecting a MIDI Device

By connecting an external MIDI device and exchanging performance data, you can control one device from another. For instance, you can output sound from other instruments, switch sounds or receive MIDI data from an external sequencer that cause your FR-4x to play. See p. 82 for MIDI parameters.

What is MIDI?

MIDI, short for **"Musical Instrument Digital Interface,"** was developed as a universal standard for the exchange of performance data among electronic musical instruments and computers.

The FR-4x is equipped with MIDI connectors to let it exchange performance data with external devices. These connectors can be used to connect the unit to an external device for even greater versatility.

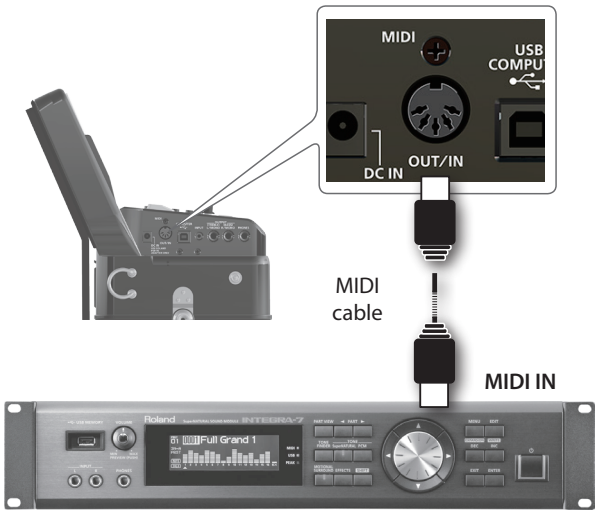
Connecting an external MIDI device to the FR-4x

The FR-4x has one MIDI connector that can be used to either transmit (OUT) or receive (IN) MIDI data.

1. Turn the volume all the way down on the FR-4x and the MIDI device you are about to connect.

2. Use a MIDI cable (sold separately) to connect the MIDI connector to each other.

Connection to transmit MIDI data to an external device:



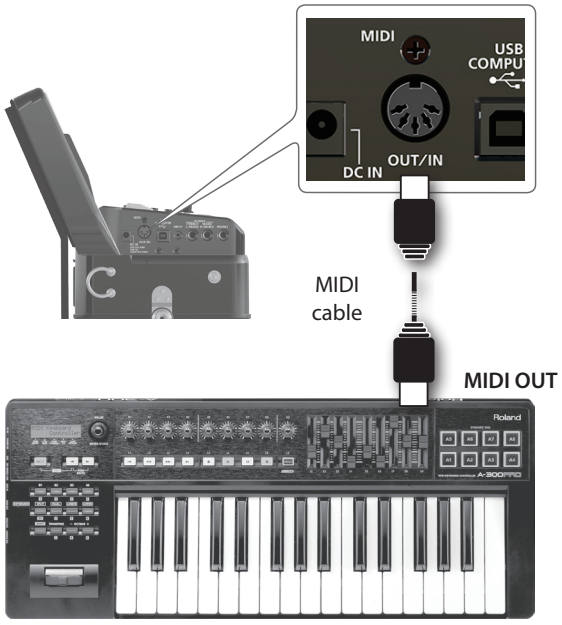
MIDI sound module

NOTE

If you connect or disconnect the AC adaptor while an external device is connected to the MIDI OUT/IN connector, unexpected data might be transmitted from MIDI OUT.

Don't connect or disconnect the AC adaptor while an external device that you're using is connected to MIDI OUT.

Connection to receive MIDI data from an external device:



e.g., MIDI keyboard

3. Adjust the volume level on the FR-4x and the connected device.

4. Set the "MIDI Out/In" parameter.

See **"MIDI Out/In"** on p. 82.

Select **"OUT"** to transmit MIDI data to an external device. (This is the default setting.)

Set it to **"IN"** to receive MIDI data from an external device.

In addition, change the **"External Seq. Playback"** (p. 83) setting of each part to **"ON."**

5. Set the MIDI channel on the FR-4x and the external device as needed.

MIDI channels

MIDI provides sixteen channels, numbered 1–16. Even if two MIDI devices are connected, you won't be able to select or play sounds on the other device unless both devices are set to the same MIDI channel. The FR-4x use the following MIDI channels:

Section	Channel
Accordion section	1
Bass/Free Bass section	2
Chord section	3
Orchestra1/Organ section	4
Orchestra Bass section	5
Orchestra Chord section	6
Orchestra Free Bass section	7
Drum section	10
Basic Channel (For selection Sets, User Program)	13

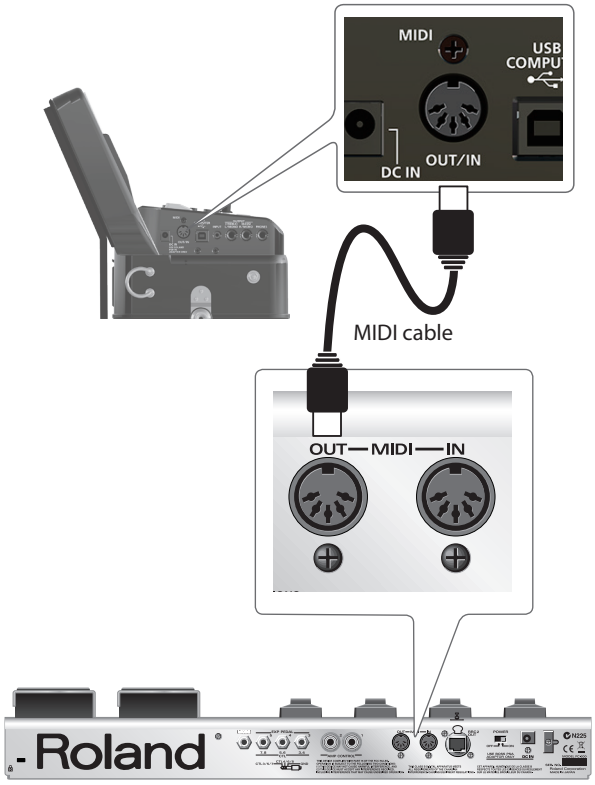
NOTE

Before making connections with other devices, you must turn down the volume of all devices and turn off the power to avoid malfunctions or speaker damage.

Connecting FR-4x to FC-300 MIDI Foot Controller

You can connect the FC-300 to expand your performance capabilities by nine industrial-grade footswitches and two programmable expression pedals.

1. Use a MIDI cable (commercially available) to connect the FR-4x to the FC-300.



NOTE

When making connections to FC-300, be sure that all equipment are switched off.

2. Switch on the power of the FR-4x (p. 15) and the FC-300.

Refer to the Owner's Manual of FC-300.

Operation on FC-300

3. Press the [MODE] button repeatedly to switch the MIDI foot controller in the "SYS" mode.

For details see the Owner's Manual of FC-300.

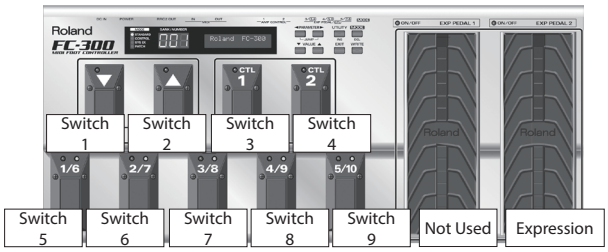
Operations on FR-4x

4. Set "MIDI Out/In" to "IN."

See **"MIDI Out/In"** on p. 82

5. Select the function that is assigned to each switch of "MIDI Foot Controller" (p. 80).

You can assign up to 9 pedals:



See **"ExpPedal"** (Orchestra part p. 55, Orchestra Bass part p. 58, Orchestra Chord part p. 62 and Orchestra Free Bass part p. 64) to enable the expression pedal control for each Orchestra part.

NOTE

The FR-4x recognize the FC-300 **"EXP PEDAL 2"** only.

p. 14

Connecting the FR-4x to Your Computer

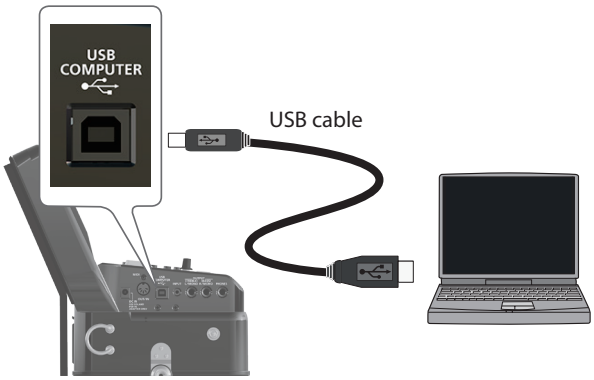
If you use a USB cable (commercially available) to connect the COMPUTER port located on the FR-4x's connection panel to the USB port of your computer, you'll be able to do the following things:

- Use the FR-4x as a sound module.
- Use the FR-4x editor.
- By transferring MIDI data between the FR-4x and your sequencer software, you'll be able to enjoy a wide range of possibilities for music production and editing.

NOTE

The FR-4x not supported the GM/GS standard

1. Use a standard USB cable (A → B-type connectors, commercially available) to connect the FR-4x to your computer as shown below.



Switching the USB driver between dedicated (Original) or standard (Generic)

Normally, you don't need to install a driver in order to connect the FR-4x to your computer. However, if some problem occurs, or if the performance is poor, using the Roland original driver may solve the problem.

For details on downloading and installing the Roland original driver, refer to the Roland website:

Roland website:

http://www.roland.com/

If you change this setting, you'll need to power the FR-4x off and then on again. Normally you should use **"ORG (Original)."**

NOTE

- To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
- Only MIDI data can be transmitted and received via USB. Audio data for a song recorded on the FR-4x cannot be transmitted or received.
- Switch on the power to the FR-4x before you start up the MIDI application on your computer. Never turn the FR-4x's power on/off while your MIDI application is running.
- If you connect the MIDI OUT/IN connector and the USB COMPUTER port to the same computer, indeterminate data might be input or output. If operation is unstable, connect only one or the other connector to your computer.

About Button Type Keyboard (FR-4xb)

How to Replace a Right Hand Button of Your FR-4xb Keyboard

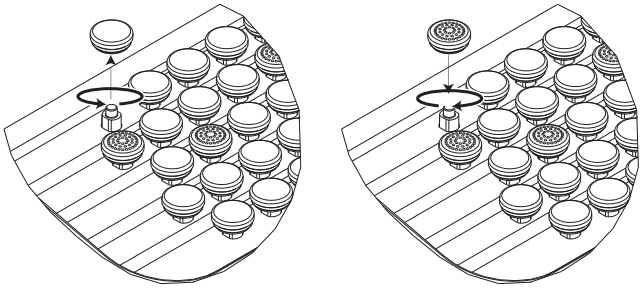
Since your FR-4x is an electronic musical instrument, changing the note assignments to the buttons is a matter of selecting the preset that best suits your playing style. You'll probably only change this setting once. But it's nice to know that it exists in case you let a fellow accordion player from another country play your FR-4x.

Please look at the illustrations on pages **"TrblMode (Treble Mode Layout)"** (p. 74) and p. 102–p. 103 to identify the setting you need. Pay attention to the note names (all Cs appear on a gray background) and look at how they are arranged, then make your selection. The numbers next to the letters refer to the octave. The numbers below the note names represent the corresponding MIDI note numbers.

You may have noticed that the treble buttons are colored white (for notes without alteration) and black (notes with alteration, i.e. ♯/♭). This coloring doesn't change when you select another system.

The FR-4x is supplied with additional white and black buttons. You can use these additional buttons to adapt the black and white treble buttons to reflect the selected treble mode.

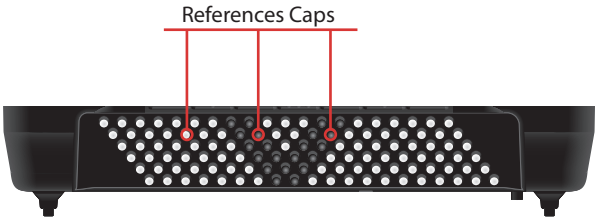
To do this, first remove the button you wish to replace by turning it counterclockwise, then install the new button and screw it clockwise.



WARNING	
⚠	Take care do not force to tighten the treble button (tighten with a torque 0.3 Nm max). Tightening this excessively might strip the button's screw threads.
⚠	If you remove the treble button from the button keyboard, be sure to replace it; don't leave them lying around where it could accidently be swallowed by small children.

Bass & Chord Button Board

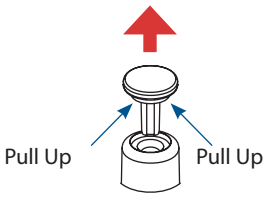
The FR-4x is supplied with several reference caps (concave and with lines) designed to help you locate the bass and chord buttons without looking at them. At the factory, three caps are installed on the buttons shown in the illustration below. Feel free to remove them and to slide them over other buttons if that feels more comfortable.



How to Remove and Insert Reference Caps

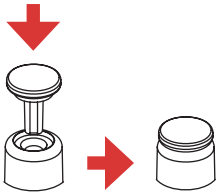
Removing the cap

1. Hold the cap with two fingers and pull it up.



Inserting the cap

1. Insert the cap into the button hole and push it.



WARNING	
⚠	If you remove the caps from the Bass & Chord button board, be sure to replace it; don't leave them lying around where it could accidently be swallowed by small children.

Turning the FR-4x On

Once everything is properly connected (p. 10), be sure to follow the procedure below to turn on their power.

If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.

1. Turn the [VOLUME] knob all the way to the left to minimize the volume.

NOTE

- Before turning the FR-4x on/off, always be sure to turn the volume down.
- Even with the volume turned down, you might hear some sound when switching the FR-4x on/off. However, this is normal and does not indicate a malfunction.
- If the message **"Battery LOW!!"** blinks in the display when using the unit on battery power, the batteries have run low.

  The FR-4x lets you check the remaining battery capacity at any time (p. 29).

2. Press the [⏻] button.

The power will turn on, an opening message will appear in the FR-4x's screen, and then the main page will appear.

After a brief interval, the FR-4x will be ready to produce sound.

3. Use the [VOLUME] knob to adjust the volume.

NOTE

This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.

4. Adjust the volume of the connected audio equipment (if connected).

Turning Off the Power

NOTE

Never switch off the FR-4x while playback or recording is running or while data are being read from, or written to, a USB flash drive.

1. Turn the [VOLUME] knob all the way to the left to minimize the volume.

You should also minimize the volume before connecting the FR-4x to equipment such as an amp.

2. Hold down the [⏻] button until the display indication disappears.

When you release your finger, the power turns off.

If you don't want the power to turn off automatically, turn the "Auto Off" setting off!

With the factory settings, the unit's power will automatically be switched off 240 minutes after you stop playing or operating the unit.

Shortly before the FR-4x shuts down automatically, the display starts counting down the seconds.

If you want to keep using the FR-4x at this stage, press any button.

If you don't want the power to turn off automatically, change the **"Auto Off"** setting to **"OFF"** as described on p. 74.

NOTE

If you need to turn off the power completely, first turn off the [⏻] switch, then unplug the power cord from the power outlet.

Refer to **"Connecting the AC Adaptor"** (p. 10).

Adjusting the Sensitivity of the Bellows

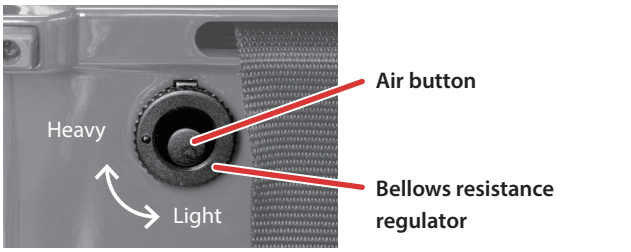
Like acoustic accordions, the FR-4x/FR-4xb produce sound when you use your left hand to open and close (expand and contract) the bellows. In general, sound is not produced unless you move the bellows.

On the FR-4x/FR-4xb, you can adjust the sensitivity of the bellows to your preference.

To adjust the sensitivity of the bellows, you'll use the bellows resistance regulator located at the side of the left-hand bellows strap, and a setting within the FR-4x (bellows curve).

1. Use the bellows resistance regulator to adjust the resistance of the bellows to being opened or closed.

Turning the bellows resistance regulator changes the resistance when opening or closing the bellows.



Next, change the internal setting (bellows curve) as follows.

2. Hold down the [SHIFT] button and press the right-hand register [7/14] button.

The following screen appears.

3. Use the VALUE [-] [+] buttons to change the value.

For details, refer to **"Bel Curv (Bellow Curve Type)"** (p. 72).

4. Press the [EXIT] button to return to the previous screen.

MEMO

The bellows curve setting is automatically saved when you turn off the power.

Air button

Pressing the air button lets you open or close the bellows quickly. Use this if the bellows are open when you've finished playing.

Real-time Adjustments

Adjusting the Sound Volume ([Volume] Knob)

Here's how to adjust the volume of your FR-4x playing or the playback volume of an audio song.

If headphones are connected, use the **[Volume]** knob to adjust the headphone volume.

1. Turn the [Volume] knob to adjust the overall volume.

Adjust the volume while you play the keyboard to produce sound.

Turning the knob toward the right will increase the volume, and turning it toward the left will decrease the volume.

When the **[VOLUME]** Knob is moved, the **"VOLUME"** pop-up window appears, showing the current setting:

After about few seconds, the pop-up window disappears again.

Volume Balance Between the Right Hand and Left Hand Sections ([BALANCE] Knob)

If the left hand section is too loud or too soft with respect to the right hand section you are using, you can change the balance with the **[BALANCE]** knob.

MEMO

The sound of the audio file is assigned to the Bass side.

NOTE

The **[BALANCE]** knob does not affect the sound that's input via the INPUT jack.

When the **[BALANCE]** Knob is moved, the **"BALANCE"** pop-up window appears, showing the current setting:

After about few seconds, the pop-up window disappears again.

Adjusting the Effects

The FR-4x contains two knobs that can be used to set the level of Chorus, Reverb.

These knobs have a detent at the center position.

When a knob is set to the center detent, the reverb or chorus will be at the level that is specified by the set or user program (Menu → Set Common → Reverb (or Chorus) → Level).

By turning the knob you can adjust the depth relative to this setting.

The depth for each part can be specified by Reverb Send (Rev send) and Chorus Send (Cho send) in each part's edit screen.

1. Turn a knob to adjust the relative effect level.

Adjust the relative effect level while you play the FR-4x.

Turning the knob toward the right will increase the level, and turning it toward the left will decrease the level.

Reverb knob

Chorus knob

After about few seconds, the pop-up window disappears again.

Listening to the Demo Songs

The FR-4x contains several of demo songs that illustrate its wide variety of sounds and applications.

1. Switch on the FR-4x.

➡ **"Turning the FR-4x On"** (p. 15)

2. Press and hold the [SONG LIST (DEMO)] button.

The following screen appears.

Playback starts automatically with the first demo song (there are 12 demo songs in all).

3. Use the [–] [+] buttons to select another demo song.

4. Use the [VOLUME] knob to change the volume if it is too loud or too soft.

5. Press [EXIT] (or again [SONG LIST (DEMO)]) to leave demo mode.

NOTE

- All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.
- No data for the music that is played will be output from MIDI OUT jack or USB COMPUTER port.

Basic Operation of the FR-4x

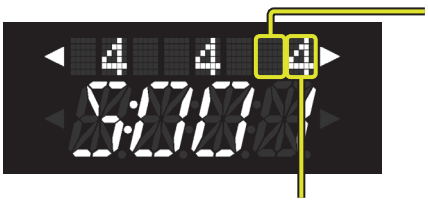
Explanation of Operations in the Main Screen

This section introduces the information that appear on the main page in FR-4x's display and how to navigate the menu.

Main Screen

The main screen shows the following information.

Right hand part status indication



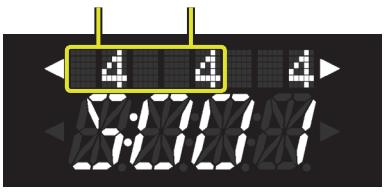
The right-hand current part (This indicates the sound part that changes when you press a right-hand register button).

- (Blank): Accordion (Treble) Part
- o: Orchestra Part
- r: Organ Part

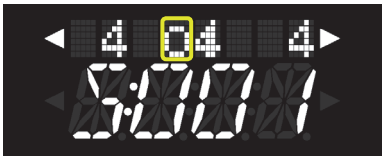
Register number selected by the right hand current part

Left hand part status indication

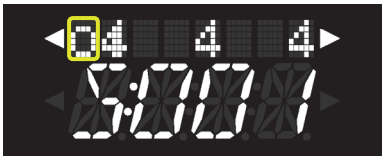
BASS area **CHRD area**



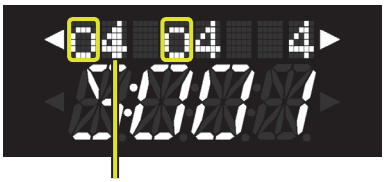
- The numbers in the BASS area and CHRD area of the illustration indicate the register number of each left hand part.
- If no **"o"** symbol is shown in the BASS area or CHORD area as in the illustration, and the same register number is shown, the left hand current part (the part that is selected when the left hand register button is pressed) indicates the bass & chord part or the free bass part.



- If an **"o"** symbol is shown in the CHRD area as in the illustration, this indicates that this is the register number of the orchestra chord part or the orchestra free bass part.



- If an **"o"** symbol is shown in the BASS area as in the illustration, this indicates that this is the register number of the orchestra bass part.



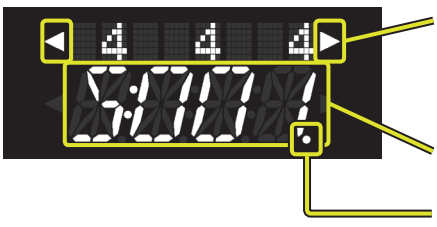
- The register of the part for the left hand orchestra can be selected separately for the chord rows (orchestra chord part / orchestra free bass part) and for the bass rows (orchestra bass part).
  In this case, the register number shown in bold characters beside the **"o"** symbol is the left hand current part.

The left hand current part's register number is shown in bold characters

MEMO

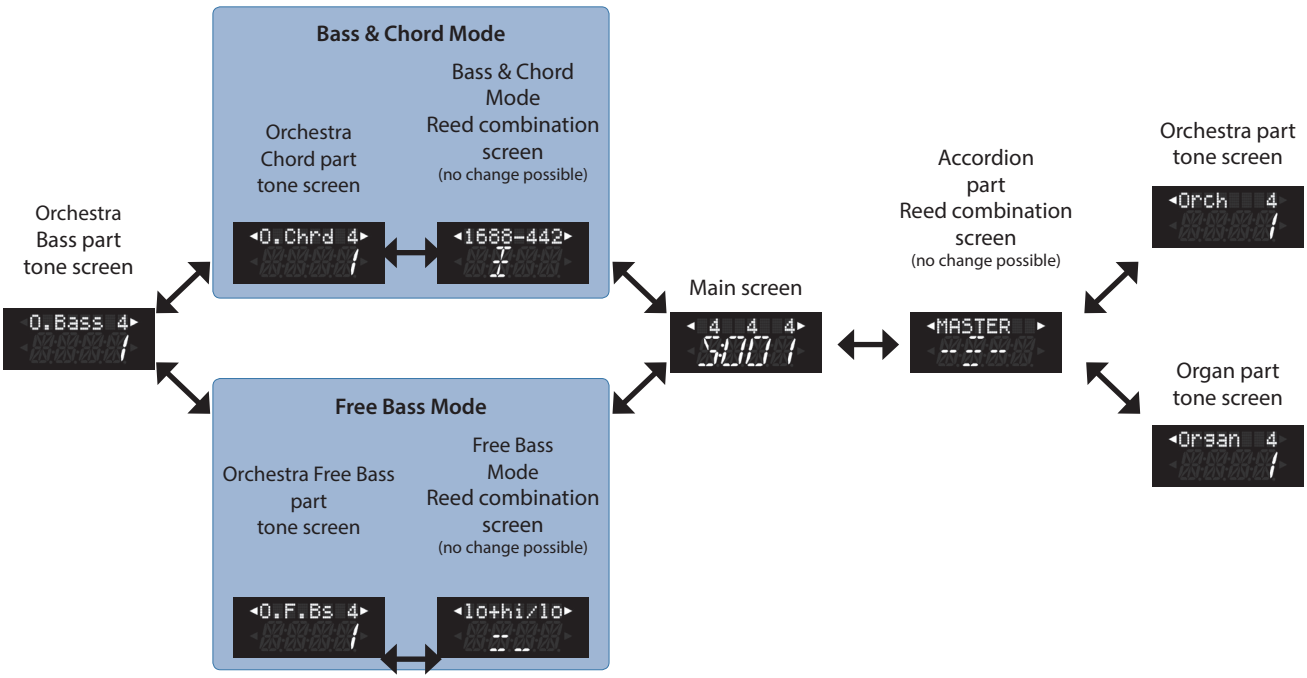
If the **[BASS&CHRD]** button is lit or blinking, bass & chord mode is selected. If the **[F.BASS]** button is lit or blinking, free bass mode is selected.

Others



- If the **"◄"** or **"►"** symbol is shown, this means that you can use the **[◄] [►]** buttons to move between screens.
  You can check or change the sound of each part in the move-destination screen.
  ➡ **"Changing the sounds assigned to the buttons"** (p. 21)
  ➡ **"Using the [◄][►] buttons to move between pages in the main screen"** (p. 19)
- The selected set number.
  Use **[–] [+]** to select a set.
- This indicates that the set has been edited but not saved.
  For details on saving your changes, refer to **"How to Save a Set"** (p. 33).
  You should also carefully read **"Important Remark About Saving Your Settings"** (p. 45).

Using the [◀][▶] buttons to move between pages in the main screen



NOTE

- You can only select screens for parts that are turned on.
- For the orchestra part/organ part/orchestra bass part/orchestra chord part/orchestra free bass part, the sound name briefly appears in the screen when you access it; then the part name and the register number selected for that part are shown.
- For the accordion part/bass & chord part/free bass part, the register name and reed combination are shown but cannot be changed.
- If the part whose screen is displayed turns off, you'll return to the main screen.
- The drum part cannot be selected.

MEMO

- In some cases, a message (information) is briefly displayed when you use a button to select something or when you turn a knob.
- The two indicators below the display are lit or unlit to indicate the status as follows.

Indicator	Explanation
USER PROGRAM	This is lit when you select user program mode. ➡ **"Recalling a User Program"** (p. 40)
A:1-7 B:8-14	This indicates whether the right-hand register buttons are operating as **[1]–[7]** (unlit) or as **[8]–[14]** (lit).

Operations in the Menu Screen and How to Edit Parameters

As described below, select a parameter from the menu screen and edit the value.

1. Press the [MENU] button.

The display screen changes as follows.

2. Use the [◄] [►] buttons to select the function group that you want to edit.

In this example, select **"System."**

3. Press the [ENTER/YES] button to enter the "System" group.

The screen changes as follows.

4. Within the "System" group, use the [◄][►] buttons to select the parameter or parameter group that you want to edit.

In this example, select the **"Tuning"** group.

On the FR-4x, parameters related to each function are organized into levels in this way.

5. Press the [ENTER/YES] button to enter the "Tuning" group.

The screen changes as follows.

6. Use the [◄] [►] buttons to select the parameter whose value you want to change.

In this example, **"Transpose"** is selected.

7. Use the [–] [+] buttons to change the value.

8. If you want to change another setting in the same function group, repeat step 6–7.

MEMO

If you want to change a setting in a different function group, Press **[EXIT/NO]** to exit the current function group, and then repeat step 4–7.

9. Press the [EXIT/NO] button several times to return to the main screen.

You can also return to the main screen by long-pressing the **[EXIT/NO]** button.

Assigning a Name

You can assign a name to a user program or a file that you are exporting.

In the example screen shown above, a user program is being saved.

The first character of the name is selected (the cursor blinks).

1. As necessary, use the [◄] [►] buttons to move the cursor to the location of the character that you want to change.

2. Use the [–] [+] buttons to select the character that you want to change.

3. Repeat step 1–2 to enter the remaining characters.

In the name entry screen, you can use the buttons shown below to perform the following operations.

Operation	Explanation
Right Register button [1]	Switch between uppercase and lowercase characters.
Right Register button [2]	Switch between alphabetical characters and numerals.
Right Register button [3]	Insert a character.
Right Register button [4]	Delete the selected character.

Selecting Tones and Playing with the Right Hand

The right hand section can be played using the 37-key keyboard (piano-type model) or 92 buttons (button-type model) on the right-hand side.

With the right hand you can play accordion, orchestral and organ sounds.

1. Press a RIGHT HAND [ACCORDION], [ORCHESTRA], [ORGAN] button to select the section that you want to play.

The pressed button lights. The button of the previously selected section turns off.

In this standard operation you can select one section at a time only.

2. Play the keyboard.

You'll hear a sound in relation to the section you selected earlier.

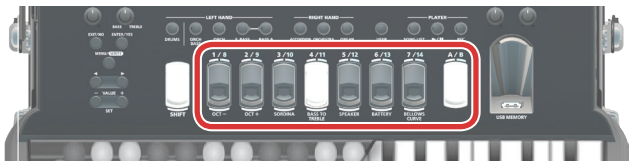
MEMO

The FR-4x only produces sound if you move the bellows. When you don't move the bellows, you hear nothing at all (as on an acoustic accordion).

When **"Bel Curv (Bellows Curve Type)"** (p. 72) is set to **"FIX.L (Fixed Low)," "FIX.M (Fixed Med),"** or **"FiX.H (Fixed High),"** you don't need to move the bellows.

3. As necessary, use the [A/B] button to switch the right-hand register button group between [1]–[7] or [8]–[14].

4. Use the right registers [1]–[14] to select other sounds of the selected section.



The selected register name or sound name is briefly displayed.

When you return to the main screen, the number of the selected right-hand register button is shown using the three digits from the right in the upper line of the screen.

For details, refer to **"Main Screen"** (p. 18).

About the right-hand register buttons

When used in conjunction with the **[A/B]** button, the register buttons of the FR-4x allow you to directly select 14 sounds.

Since you can also change the orchestral or organ sound that is assigned to each button, you can choose from more sounds than the number of actual buttons.

You can choose from 32 sounds for the organ part, and 162 sounds for the orchestral part.

For details on operation, refer to the next section, **"Changing the sounds assigned to the buttons"** (p. 21).

Changing the sounds assigned to the buttons

a. **In the main screen, use the [◄] [►] buttons to access the screen that shows the sound numbers of each part.**

The illustration above is an example showing the sound screen for the orchestral part.

For details, refer to **"Using the [◄][►] buttons to move between pages in the main screen"** (p. 19).

b. **Use the [–] [+] buttons to switch the sound number.**

NOTE

You can't change the reed combination of the accordion part.

How the accordion part's reed combination is shown

For the accordion part, the lower line of the screen shows the reed combination corresponding to the selected button, as shown below.

Footages	16′	-8′	8′	+8′	4′	2-2/3′	5-1/3′	ALL
Footage diagram								
Corresponding segment in the screen								
Corresponding segment in the screen (for Cassotto)								

NOTE

- The sounds recalled by right registers **[1]**–**[14]** depend on which Set is currently selected.

  For details, refer to **"Using Sets"** (p. 33).
- If you hold down one of the right hand register buttons, the selected part is muted, and no sound is heard when you play the keyboard (keyboard data is only transmitted via MIDI). Press the right hand register button once again to cancel muting.

About Organ Sounds (VTW)

The FR-4x contains a virtual organ that is based on Roland's Virtual Tone Wheel technology.

You can play organ sounds like an organ player by using the Right Hand (TW Upper), Left Hand chord and Bass sections (TW Lower, TW Pedal).

You are free to assign an organ sound to just one section, to two, or to all three of them.

For more details, refer to**"Right Hand Organ Part Parameters (Organ Edit)"** (p. 56), **"Left Hand Orchestra Bass Part Parameters (Orchestra Bass Edit)"** (p. 57) and **"Left Hand Orchestra Chord Part Parameters (Orchestra Chord Edit)"** (p. 60).

Playing Multiple Tones with the Keyboard

You can perform with up to two layered tones applied to the entire keyboard.

To do this you can select more than one section simultaneously by pressing the desired RIGHT HAND buttons at the same time and by assigning one tone to each of these layers.

ACCORDION Section

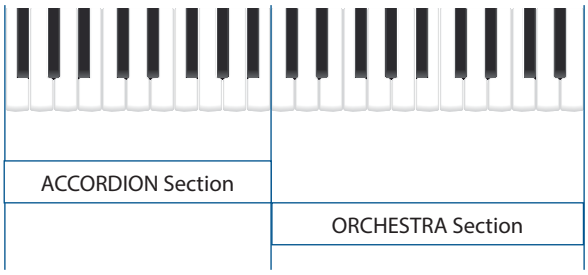
ORCHESTRA Section or ORGAN Section

MEMO

You have the possibility to change the key range of each section.

In this way you can play the Accordion section in the lower part of the keyboard and the Orchestra section in the higher part.

➡ **"Assigning a Portion of Right Hand Keyboard to Each Section"** (p. 27)



ACCORDION Section

ORCHESTRA Section

NOTE

The Organ section and the Orchestra section cannot be used at the same time.

1. Press simultaneously two RIGHT HAND buttons to select the section combination that you want to play.

The combination of the RIGHT HAND sections are shown in the table just below.

What you want to play	Press and hold simultaneously
ACCORDION + ORGAN	**[ACCORDION]** and **[ORGAN]** button
ACCORDION + ORCHESTRA	**[ACCORDION]** and **[ORCHESTRA]** button

The buttons of the selected sections light.

* If multiple tones are selected for more than one part, you can use the right hand register buttons **[1]**–**[14]** to change the sound of the last-selected part.

2. Play the keyboard.

You'll hear a sound in relation to the sections you selected earlier.

The active sections play in relation to the selected Keyboard Mode.

At default the Keyboard Mode parameter value is set to **"Zone"** and all sections play on the whole extension of the keyboard.

For more detail about the Keyboard Mode see **"Keyboard Mode Parameters for the Right Hand Keyboard (Right Hand Mode)"** (p. 69)

Reselecting the part and switching the sound

You can have more than one active section but only one of them is active for changing the tone.

If you want to switch to a sound that's different from the selected part, reselect the part and then switch the sound.

3. Press and hold the button of one active section where you want to change the tone, as long as it starts flashing.

The right-most three digits in the upper line of the screen show the part whose sound you're changing.

- (Blank): Accordion (Treble) Part
- o: Orchestra Part
- r: Organ Part

In the above example the **"ACCORDION"** section is active for changing tone.

4. Use the right registers [1]–[14] to select other sounds belonging to the selected section.

NOTE

The sounds recalled by right registers **[1]**–**[14]** depend on which Set is currently selected.

➡ **"Using Sets"** (p. 33)

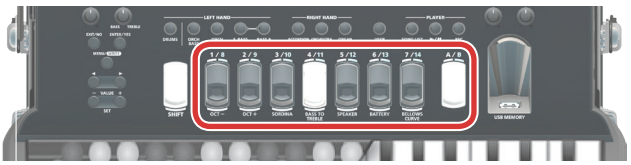
Playing the Bass Section with Your Right Hand Like a Bassoon (BASS TO TREBLE)

The FR-4x provides a mode in which it can be used like a bassoon accordion. In this mode, the bass part is played with the right hand (BASS TO TREBLE mode).

The bass and chord buttons on the left hand are inactive (a real bassoon accordion doesn't have bass / chord buttons and can only be played with one hand).

1. Hold down the [SHIFT] button and press the right-hand register button [4/11] (BASS TO TREBLE).

2. Use the right registers [1]–[14] to select the desiderate bass-to-treble sound.



The first seven registers [1]–[7] recall accordion sounds and the other seven register [8]–[14] recall orchestral sounds.

For right hand register buttons 1–7

For right hand register buttons 8–14

MEMO

If you want to select one of the [8]–[14] buttons, press the [A/B] button to select the 8–14 group.

NOTE

Bass-to-Treble mode uses the F.BASS (accordion sounds) and ORCH BASS (orchestral sounds).

The bass orchestral sounds assignments can be different for each Set.

3. Start playing the bass part with your right hand.

4. Once again, hold down the [SHIFT] button and press the right-hand register button [4/11] (BASS TO TREBLE) to exit this mode.

Selecting Tones and Playing with the Left Hand

The left hand section can be played using the bass button board. These 120 buttons are used to play bass notes and chords.

With the left hand you can play accordion, orchestral sounds and organ sounds (You can select the organ sounds by the orchestra tone list). You can play drum sounds also.

➡ **"Playing Drum Sounds"** (p. 27)

MEMO

The FR-4x only produces sound if you move the bellows. When you don't move the bellows, you hear nothing at all (as on an acoustic accordion).

When **"Bel Curv (Bellows Curve Type)"** (p. 72) is set to **"FIX.L (Fixed Low),"** **"FIX.M (Fixed Med),"** or **"FiX.H (Fixed High),"** you don't need to move the bellows.

Bass and Chord System (BASS & CHRD)

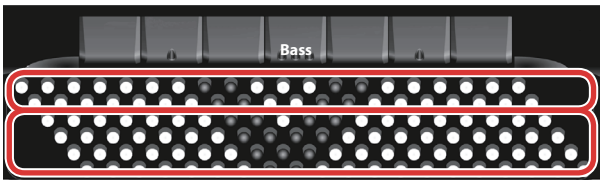
The bass button board in this system allows you to play both bass notes and chords.

The **"real"** bass notes are assigned to the two highlighted rows. The remaining buttons are used to play chords.

The button board use the **"Stradella"** bass standard layout.

The FR-4x give you to specify the layout of the Bass and Chord board.

➡ **"B&C Mode (Bass & Chord Mode)"** (p. 73)



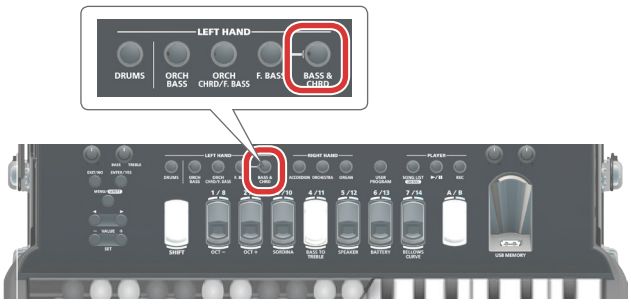
How the reed combination is shown for the bass & chord part

For the bass & chord part, the lower line of the screen shows the reed combination corresponding to the selected button, as shown in the illustration.

Footages	16′	8′	8-4′	4′	2′	ALL
Footage diagram						
Corresponding segment in the screen						

1. Press the LEFT HAND [BASS & CHRD] button.

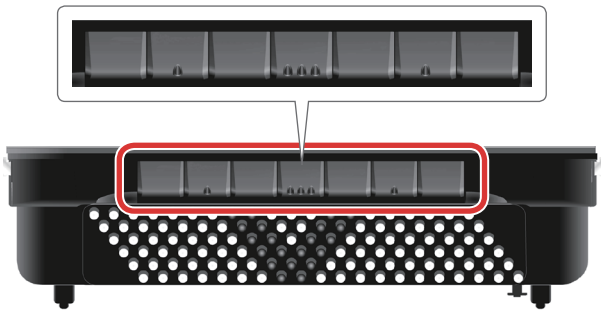
The [BASS & CHRD] button lights (default condition when FR-4x is turned on).



2. Play the left hand button keyboard.

You'll hear an accordion sound.

3. Use the left registers to select other accordion sounds.



The selected register name or sound name is briefly displayed.

* The screen differs depending on the selected set or register.

➡ **"How the reed combination is shown for the bass & chord part"** (p. 23)

This choice always applies to both the bass and the chord rows.

When you return to the main screen, the five left-most digits in the upper line of the screen show the number of the selected left-hand register button.

➡ **"Main Screen"** (p. 18)

NOTE

- The sounds recalled by left registers depend on which Set is currently selected.

➡ **"Using Sets"** (p. 33)

- If you hold down one of the left hand register buttons, the selected part is muted, and no sound is heard when you play the keyboard (keyboard data is only transmitted via MIDI). Press the left hand register button once again to cancel muting.

About the left-hand register buttons

The left-hand register buttons [1]–[7] of the FR-4x allow you to directly recall seven sounds.

You can assign an orchestral sound of your choice to each button.

For the orchestral chord part, orchestra, bass part, and orchestral free bass part you can choose from 162 sounds.

For the orchestral chord part, orchestral, bass part, and orchestral free bass part, you can also choose VTW organ sounds.

For details on operation, refer to **"Changing the sounds assigned to the buttons"** (p. 21).

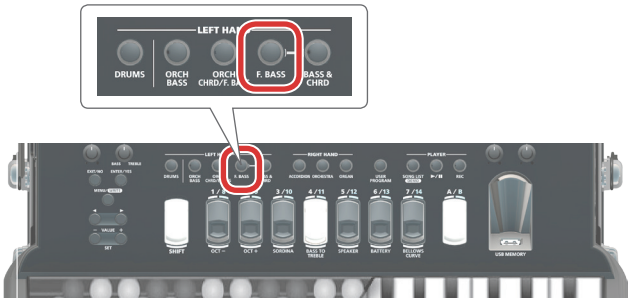
Free Bass Mode (F.BASS)

In free bass mode, the outer four rows of the left-hand button keyboard use the free bass button layout.

One note is assigned to each button, and you can use the buttons to freely play melodies or freely-constructed chords in the same way as the right-hand keyboard.

1. Press the LEFT HAND [F.BASS] button.

The [F.BASS] button lights.



2. Play the bass button board.

You'll hear single accordion sounds.

How the reed combination of the free bass part is displayed

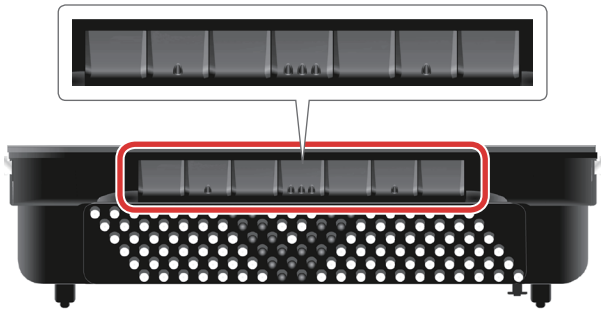
For the free bass part, the reed combination corresponding to the selected button is shown in lower line of the screen as depicted in the illustration.

The buttons assigned to the Low and High sides change depending on the selected **"FBs Mode (Free Bass Mode)"** (p. 51) setting.

Refer to the illustration on **"FREE BASS MODE TABLE"** (p. 101) (Low side: white buttons, High side: black buttons).

Footages	Low side 16′	Low side 8′	High side 16′	High side 8′	ALL
Footage diagram					
Corresponding segment in the screen					

3. Use the left registers to select other accordion sounds.



The selected register name or sound name is briefly displayed.

* The screen differs depending on the selected set or register.

➡ **"How the reed combination of the free bass part is displayed"** (p. 24)

The sound that you select here is applied to both the Low layout and the High layout.

When you return to the main screen, the number of the selected left-hand register button is shown using the five left-most digits in the upper line of the screen.

➡ **"Main Screen"** (p. 18)

NOTE

The sounds recalled by left registers depend on which Set is currently selected.

➡ **"Using Sets"** (p. 33)

4. Press the LEFT HAND [BASS & CHRD] button to exit from Free Bass system.

Playing Orchestral Sounds

Here is how to select an orchestral sound for the left hand.

An orchestral sound can be assigned to only the bass buttons, only the chord buttons, or both (in which case you can select different orchestral sounds for the bass and chord rows).

You can also play accordion and orchestral sounds at the same time.

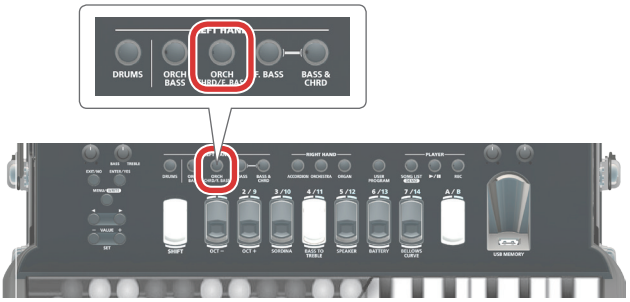
You can obtain different combinations using the buttons in the LEFT HAND section.

Playing Orchestral Sounds Using Bass and Chord System

1. Press the LEFT HAND [BASS & CHRD] button.

The **[BASS & CHRD]** button lights

2. Press the LEFT HAND [ORCH CHRD/F.BASS] button to select an orchestral sound in the Chord section.



The **[ORCH CHRD/F.BASS]** button indicator lights to indicate that the Chord section plays Orchestral Sounds.

The **[BASS & CHRD]** button indicator flashes to indicate that the Chord section doesn't play Accordion Sounds.

In the screen, you can see that the orchestral chord part is on.

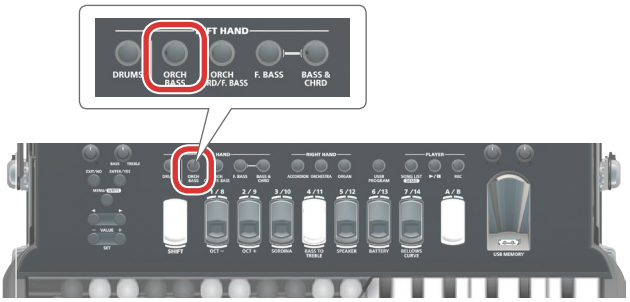
3. Play the bass button board.

You'll hear an Orchestra sound when you press a chord button in the button board and an Accordion sound when you play bass buttons.

4. Use the left registers to select other Orchestral sounds.

This choice is applied to Chord Section.

5. Press the LEFT HAND [ORCH BASS] button to select an orchestral sound in the Bass section.



The **[ORCH BASS]** button indicator lights to indicate that the Bass section plays Orchestral Sounds.

The **[BASS & CHRD]** button indicator flashes to indicate that the Chord and Bass section doesn't play Accordion Sounds.

In the screen, you can see that the orchestral bass part is on.

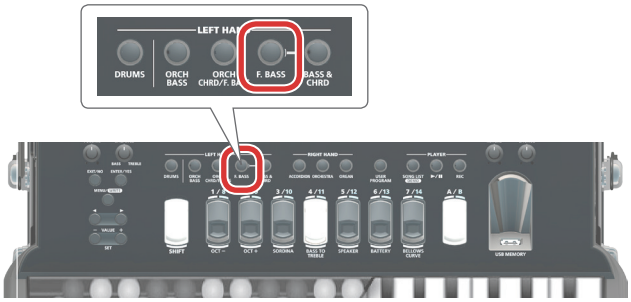
6. Use the left registers to select other Orchestral sounds.

This choice is applied to Bass Section.

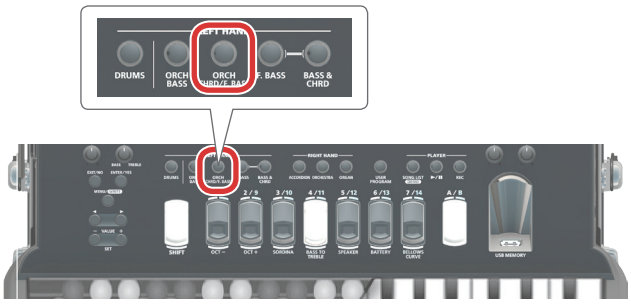
Playing Orchestral Sounds Using Free Bass System

1. Press the LEFT HAND [F.BASS] button.

The **[F.BASS]** button lights.



2. Press the LEFT HAND [ORCH CHRD/F.BASS] button to select an orchestral sound in the Chord section.



The [ORCH CHRD/F.BASS] button indicator lights to indicate that the Chord section plays Orchestral Sounds.

The [F.BASS] button indicator flashes to indicate that the Chord section doesn't play Accordion Sounds.

In the screen, you can see that the orchestral free bass part is on.

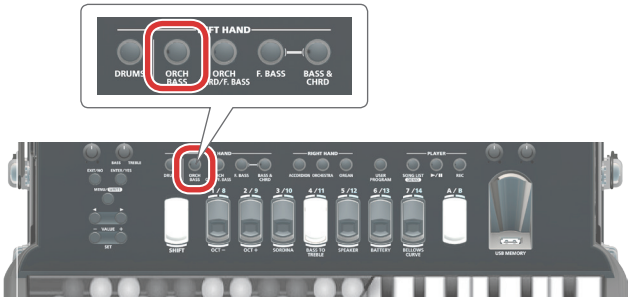
3. Play the bass button board.

You'll hear an Orchestra sound when you press a chord button in the button board and an Accordion sound when you play bass buttons.

4. Use the left registers to select other Orchestral sounds.

This choice is applied to Chord Section.

5. Press the LEFT HAND [ORCH BASS] button to select an orchestral sound in the Bass section.



The [ORCH BASS] button indicator lights to indicate that the Bass section plays Orchestral Sounds.

The [BASS & CHRD] button indicator flashes to indicate that the Chord and Bass section doesn't play Accordion Sounds.

In the screen, you can see that the orchestral bass part is on.

6. Use the left registers to select other Orchestral sounds.

This choice is applied to Bass Section.

How to Play Different Accordion and Orchestral Sounds Together (Layer)

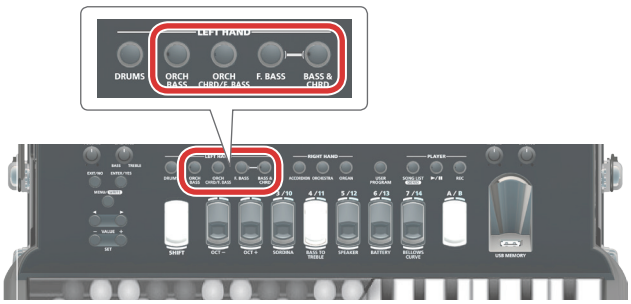
The FR-4x allows you to play different sounds in the left hand, both of which play whenever you press a key.

If you wish to play more than one sound in layer press the desired LEFT HAND buttons at the same time.

The following combinations are possible:

What you want to play in	Press simultaneously
Bass rows: **Accordion + Orchestra** Chord rows: **Accordion**	[BASS & CHRD] and [ORCH BASS] button During Free Bass mode [F.BASS] and [ORCH BASS] button
Bass rows: **Accordion** Chord rows: **Accordion + Orchestral**	[BASS & CHRD] and [ORCH CHRD/F.BASS] button During Free Bass mode [F.BASS] and [ORCH CHRD/F.BASS] button
Bass rows: **Accordion + Orchestral** Chord rows: **Accordion + Orchestral**	[BASS & CHRD] and [ORCH CHRD/F.BASS] and [ORCH BASS] button During Free Bass mode [F.BASS] and [ORCH CHRD/F.BASS] and [ORCH BASS] button

1. Press simultaneously two or three LEFT HAND buttons to select the sound combination that you want to play.



The combination of the LEFT HAND sections are shown in the table just above.

The buttons of the selected sections light steady.

NOTE

When you select a combination of sections, the last LEFT HAND button pressed is active for changing tone.

2. Play the bass button board.

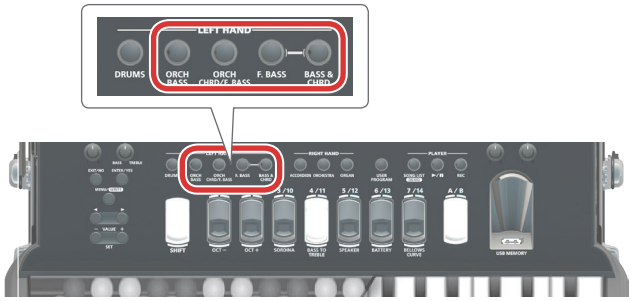
You'll hear a sound in relation to the sections you selected earlier.

Reselecting the part and switching the sound

You can have more than one active section but only one of them is active for changing the tone.

If you want to switch to a sound that's different from the selected part, reselect the part and then switch the sound.

3. Press and hold the button of one active section where you want to change the tone, as long as it starts flashing.



The left hand register number selected for the part after the change is shown in the screen in bold characters.

In the above example the **"ORCH BASS"** section is active for changing tone.

4. Use the left registers to select other sounds belonging to the selected section.

NOTE

The sounds recalled by left registers depend on which Set is currently selected.

➡ **"Using Sets"** (p. 33)

Playing Drum Sounds

The FR-4x lets you use the left-hand button keyboard to play drum sounds.

You can also play them simultaneously with bass and chords.

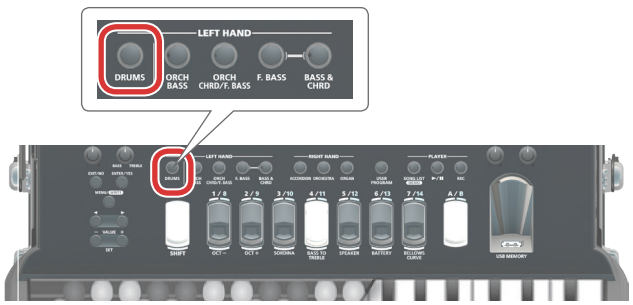
You can set many other parameters such as the type of Drum Set for your performance and link drum instruments to the Left Hand and much more.

➡ **"Drum Sound Parameters (Drum Edit)"** (p. 66)

NOTE

Drum sounds cannot be used in free bass mode or in bass to treble mode.

1. Press the [DRUMS] button to activate the Drum section.



2. Play the Left Hand button board.

You'll hear Drum sounds.

MEMO

For the left hand button keyboard's bass buttons and chord buttons, you can specify up to three types of drum sound for each.

For example if you specify three types of drum sound, the three sounds are heard simultaneously when you play the keyboard.

You can also make settings so that one drum sound is heard when you press a key and a different drum sound is heard when you release the key.

➡ **"Bass Link1–3"** (p. 67)

➡ **"Chord Link1–3"** (p. 67)

Right Hand Keyboard Mode

The FR-4x lets you divide the right hand keyboard into two areas and specify a different sound for each area.

Moreover you have the possibility to set a keyboard mode (High or Low) that allows you to play two different sounds depending on the way you play.

Assigning a Portion of Right Hand Keyboard to Each Section

1. From the menu, select "RightHnd (Right Hand Mode)" and press [ENTER/YES] button.

➡ **"Selecting Parameters"** (p. 44)

2. Use the [◄] [►] buttons to select "TYPE," and use the [–] [+] buttons to specify "Zone."

With the default setting, the Type is set to **"Zone."**

3. Use the [◄] [►] buttons to select the "A Lw Key (Accordion Low Key)" or "A Hi Key (Accordion High Key)."

4. Use the [–] [+] buttons to specify the range of keys that will play the accordion part.

5. Use the [◄] [►] buttons to select the "O Lw Key (Orchestra/Organ Low Key)" or "O Hi Key (Orchestra/Organ High Key)."

6. Use the [–] [+] buttons to specify the range of keys that will play the orchestral part and the organ part.

Playing Chords and a Solo Line Using Different Sections (High and Low)

To use these types of keyboard mode you need to select two sections simultaneously by pressing the desired RIGHT HAND buttons at the same time.

➡ **"Playing Multiple Tones with the Keyboard"** (p. 22)

1. From the menu, select "RightHnd (Right Hand Mode)" and press [ENTER/YES] button.

➡ **"Selecting Parameters"** (p. 44)

2. Use the [◄] [►] buttons to select "TYPE," and use the [-] [+] buttons to specify "Hight" or "Low"

3. While pressing the RIGHT HAND [ACCORDION] button, press the RIGHT HAND [ORCHESTRA] button.

The **[ACCORDION]** button indicator lights steadily to indicate that it is the first section that plays when you press a key in the right keyboard.

The **[ORCHESTRA]** button indicator flashes.

You can also use the following combinations:

Press and hold (1st button pressed)	Press (2nd button pressed)
[ACCORDION] button (Lights)	**[ORCHESTRA]** button (Flashes)
[ACCORDION] button (Lights)	**[ORGAN]** button (Flashes)
[ORCHESTRA] button (Lights)	**[ACCORDION]** button (Flashes)
[ORGAN] button (Lights)	**[ACCORDION]** button (Flashes)

NOTE

If you select any combinations other than the above ones, the Keyboard mode **"High"** or **"Low"** has no effect.

MEMO

Keep in mind that the first RIGHT HAND button that you press, is the first section that plays when you press a key in the right keyboard.

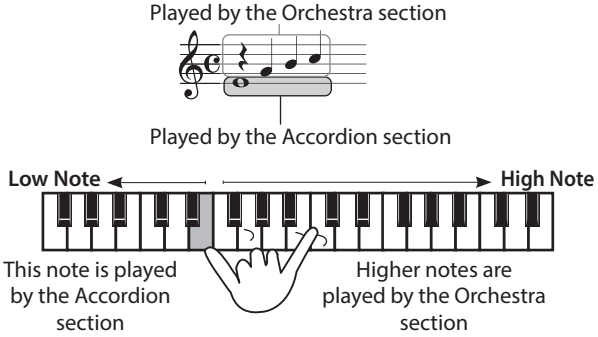
In the following explanation we selected the combination at the step 3.

If you set the Keyboard Mode to"Low"

a. If you keep holding a key while pressing another (higher) key, the highest note is played by the Accordion section.

If you hold down that key and play a key above it, the orchestra part is heard.

This is perfect for situations where you need to play chords and a solo line using different sounds.

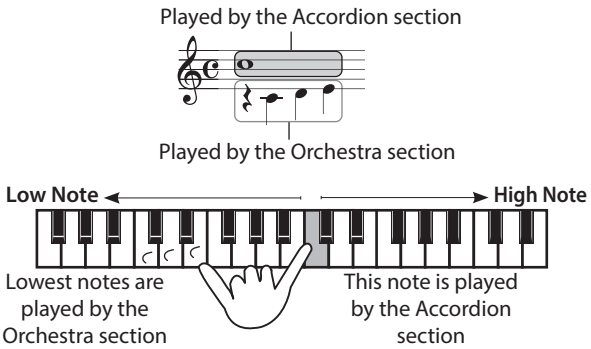


If you set the Keyboard Mode to"High"

This is the opposite of **"Low"** mode:

a. If you keep holding a key while pressing another (lower) key, the lowest note is played by the Accordion section.

If you hold down that key and play a key below it, the orchestra part is heard.



Quickly Specifying the Volume of the Orchestral Part, Drum Part, or Audio

Although you can specify the volumes of the orchestral part, drum part, and audio from the menu, you can also use the following shortcut operations to access the volume setting screen and quickly specify the volume of each part.

Operation	Part whose volume is specified
[SHIFT] + **[ORCHESTRA]**	Orchestra Part
[SHIFT] + **[ORGAN]**	Organ Part
[SHIFT] + **[ORCH BASS]**	Orchestra Bass Part
[SHIFT] + **[ORCH CHORD/F. BASS]**	Orchestra Chord Part (During Free Bass mode, Orchestra Free Bass part)
[SHIFT] + **[DRUMS]**	Drum Part
[SHIFT]+ **[SONG LIST]**	Audio File

NOTE

The volume of the accordion sound parts (accordion part / bass part / chord part / free bass part) is fixed.

Other Important Function

This section presents other important functions you may need regularly.

Viewing the Remaining Battery Level

1. Hold down the [SHIFT] button and press the right hand register [6/13].

The display shows the battery status.

"Battery oooo" indicates maximum remaining amount, **"Battery ooo"** indicates high, **"Battery oo"** indicates medium, and **"Battery o"** indicates low battery level.

If **"Battery LOW!!"** is shown, you must replace or charge the batteries.

If the **"Battery ADAP"** message is shown, the included adaptor is being used.

The previous screen reappears after a time.

Switching the Speaker Setting

If the FR-4x is connected to an external amp system, you can turn the Speakers setting **"OFF"** to disable the built-in speakers, so that no sound is output from the FR-4x itself. This is convenient when you want to conserve the batteries.

If the Speakers setting is either **"ON"** or **"ON.PH (On+Phones),"** the speaker is on, and sound is output from the FR-4x itself.

However with the **"ON"** setting, connecting headphones to the PHONES jack automatically turns off the built-in speakers.

1. Hold down the [SHIFT] button and press the right hand register [5/12].

Each time you press this, the setting of the Speakers changes in the following order.

Off → On → On+Phones → Off → ...

The Speakers setting screen appears.

The previous screen reappears after a time.

MEMO

You can also change this by using the **"Speakers"** (p. 74).

Additional Information About the Organ Sounds and the Rotary Effect (Organ Section)

A rotary effect (an effect that adds the modulation that is characteristic of a rotating speaker) is applied to organ sounds.

The FR-4x lets you switch the rotational speed of this rotary effect between fast and slow.

1. Select the organ tone.

➡ **"Selecting Tones and Playing with the Right Hand"** (p. 21)

2. Once again press the button of the selected organ sound.

Each time you press the button, the rotary effect speed switches between fast and slow.

The screen briefly indicates **"Rotary SLOW"** or **"Rotary FAST."**

NOTE

Slow / Fast switching of the rotary effect is common with the VTW organ tones of the orchestra bass part, orchestra chord part and orchestra free bass part.

MEMO

Rotary effect can also switch the function buttons or MIDI foot controller (p. 76).

Using the Sordina

On an acoustic accordion, this closes the wooden resonance chamber inside the instrument.

The FR-4x simulates this effect electronically.

1. Hold down the [SHIFT] button and press the right hand register [3/10].

Sordina turns on.

The following screen appears.

The previous screen reappears after a time.

2. To turn it off, once again hold down the [SHIFT] button and press right hand register button [3/10].

NOTE

- The sordina effect applies only to the right hand sound.
- Sordina effect is OFF at the time of power-on. Also, it will not be stored in the system / the SET / the User Program.

Changing the Pitch of the Tone in Octave Steps with the Right-Hand Keyboard

The key range of the right hand current part can be moved one octave up or down.

1. **To move it one octave down, hold down the [SHIFT] button and press the right hand register button [1/8] (OCT–).**
2. **To move it one octave up, hold down the [SHIFT] button and press the right hand register button [2/9] (OCT+).**

The display shows a screen to confirm the setting.

Accordion Part

Orchestra Part

Organ Part

The previous screen reappears after a time.

MEMO

This setting is stored in the user program.

NOTE

This function does not apply for bass to treble mode.

➡ **"Playing the Bass Section with Your Right Hand Like a Bassoon (BASS TO TREBLE)"** (p. 23)

Transposing to a Different Key

The pitch of the FR-4x can be transposed in semitone units.

For example if a song is in a difficult key that contains numerous sharps or flats, you can use this function to transpose it for easier fingering.

1. **In the main screen, press the [MENU] button.**
2. **Use the [◄] [►] buttons to select "System."**
3. **Press the [ENTER/YES] button.**
4. **Use the [◄] [►] buttons to select "Tuning."**
5. **Press the [ENTER/YES] button.**
6. **Use the [◄] [►] buttons to select "Trnspose."**

The following screen appears.

7. **Use the [–] [+] buttons to select the amount of transposition.**

Parameter	Value
Transpose	-6–0–+5 (semi tone units)

Select **"0"** to switch off the transposition.

8. **Press [EXIT/NO] to return to the main page.**

To save this change, refer to **"Saving an User Program"** (p. 39).

Musette Detune

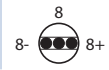
You probably know that an accordion's 8'Treble register may consist of 2 or even 3 reeds that are usually tuned apart to provide a richer sound (accordionists call it the **"musette effect"**).

One reed is tuned slightly above, the other slightly below the correct pitch, and the third (if available) is tuned **"properly."**

It is normally difficult to tune the reeds, and this is not something that a performer would do on their own. However, the FR-4x makes it easy to adjust the reed tuning.

NOTE

This function is only available for the Accordion section and if an accordion sound that contains at least the following footages is selected:

Footages	
8, 8-, 8+	

1. **In the main screen, press the [MENU] button.**
2. **Use the [◄] [►] buttons to select "Acc Edit."**
3. **Press the [ENTER/YES] button.**
4. **Use the [◄] [►] buttons to select "MusetTyp."**

The display changes to:

5. Use the [–] [+] buttons to select the type of musette detune.

Parameter	Value
MusetTyp (Musette Detune Type)	Off (no detune), Dry, Classic, F-Folk, American_L, American_H, North_Europe, German_L, D Folk_L, Italian_L, German_H, Alpine, Italian_H, D-Folk_H, French, Scottish

6. Press the [EXIT/NO] button several times to return to the main screen.

To save this change, refer to **"How to Save a Set"** (p. 33).

Scale (Tuning)

Almost every music culture has its own accordion variety.

Arabic, Indonesian and other musical cultures do not use the equal temperament that is favored in Europe, the Americas, etc.

The FR-4x features a **"Scale"** parameter that allows you to select the tuning system that best fits the music you want to play.

If the tuning system you need is not among the factory settings, you can program it yourself, save it to a User 1~3 memory and then select it here.

➡ **"Scale Tune Edit"** (p. 76)

1. In the main screen, press the [MENU] button.

2. Use the [◄] [►] buttons to select "System."

3. Press the [ENTER/YES] button.

4. Use the [◄] [►] buttons to select "Tuning."

5. Press the [ENTER/YES] button.

6. Use the [◄] [►] buttons to select "S. TunTyp."

The display changes to:

7. Use the [–] [+] buttons to select the type of scale.

Type	Display	Explanation
Equal		(Off) This tuning divides each octave into 12 equal steps (intervals).
User 1–3		These settings refer to the tuning systems programmed by yourself (or someone else). ➡ **"Scale Tune Edit"** (p. 76)
Arabic 1, Arabic 2		These two settings refer to Arabic tuning systems. • Select **"1"** to lower the E and B notes by a quarter tone (–50 cents). • **"2"** represents a scale where the E and A are tuned down a quarter tone.
Just Major		This is a classical (western) tuning that resolved the ambiguity of fifths and thirds. Quite beautiful sonorities are produced with chords, but the scale is unbalanced, so it is not well-suited for melodies.
Just Minor		This is a just scale for pieces in minor keys.
Pythagorean		This system was invented in ancient Greece. It resolves the ambiguity of fourths and fifths. Though thirds are somewhat imperfect, melodies sound clearer.
Mean Tone		A temperament that adds some compromises to the just temperament and facilitates transposition.
Werckmeister		A combination of the Mean Tone and Pythagorean temperaments, this tuning allows for playing in any key.
Kirnberger		As a result of improvements made to the Mean Tone and Just temperaments, this tuning system is relatively tolerant towards transposition and can be used to play in all keys.

8. Use the [◄] [►] buttons to select "S. TunPat."

9. Use the [–] [+] buttons to select the part whose scale you want to specify.

ASSIGNED PART	Display	Explanation
Accordion		Accordion part
Orchestra		Orchestra part
Accordion & Orchestra		Accordion part and Orchestra part
Bass&Chord		Bass & Chord part
Orch Bass		Orchestra Bass part
Orch Chord		Orchestra Chord part
Orch Free Bass		Orchestra Free Bass part
ALL		Select **"All"** to assign your settings to all parts.

MEMO

Except for **"Equal,"** you also need to specify the root / fundamental (**"C"** for major and **"A"** for minor) according to the key of the song to be played.

10. Use the [◄] [►] buttons to select "S. TunKey."

11. Use the [–] [+] buttons to select the root of the scale in the range of C–B.

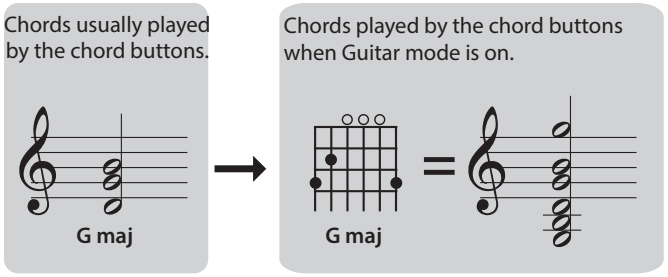
12. Press the [EXIT/NO] button several times to return to the main screen.

To save this change, refer to **"How to Save System Parameters"** (p. 86).

Guitar Mode for the Orchestral Chord Section

The FR-4x Guitar mode allows you to play realistic guitar parts.

When you activate this mode, all chord buttons trigger 6-note chords (like on a guitar) rather than the 3-note chords typical of an accordion.



You can activate this setting in the **"Left Hand Orchestra Chord Part Parameters (Orchestra Chord Edit)"** (p. 60)

In the **"LowestNt (LoweSt Note)"** (p. 57), rather than simply specify the lowest notes the chords can play, you can also choose one of thee guitar chord voicings (**"Gtr Table1," "Gtr Table2," "Gtr Table3"** tablatures).

Using Sets

FR-4x recreates the sounds of various accordion instruments and can even generate orchestral sounds (like trumpet, flute, etc.), organ and drum sounds.

There are 100 Set memories and some of them already contain useful settings right out of the box. But you can replace them with your own settings.

And if 100 Sets are not enough, you can archive and load new sets using an optional USB flash drive

➡ **"Saving a Set or User Program to a USB Flash Drive (Export)"** (p. 94)

➡ **"Importing a Set or User Program from a USB Flash Drive (Import)"** (p. 94)

The FR-4x has an extra Set memory called Working Area (WA).

➡ **"Working with User Programs"** (p. 39)

What is a set?

Each set is a type of accordion.

When you change a set you change your accordion into another accordion.

The concept of a set includes the settings for the orchestra sound/organ sound/drum sound, allowing you to perform using these sounds as well.

The FR-4x comes with different accordions (sets) already programmed.

Design your own accordion

Moreover you can change many parameters designing your favorite accordion and save them into a Set.

➡ **"How to Save a Set"** (p. 33)

To edit the accordion parameter, see **"Accordion parameters"** (p. 45).

How to Select Sets

1. In the main screen, press the [–] [+] buttons.

A set is recalled, and the screen indicates the name of the set.

In the example shown above, **"CLASSIC S:002"** is selected.

After a time, the main screen reappears.

2. To select a different set, use the [–] [+] buttons again.

MEMO

You can also use the function switches or a MIDI foot controller to select sets.

➡ **"Function Switch"** (p. 76)

➡ **"MIDI Foot Controller"** (p. 80)

How to Save a Set

The FR-4x has a memory that holds the data of all Sets, User Program, Registers, Global settings, etc. You can change whatever you need to change without worrying about saving your changes until you are sure that you want to keep them.

Be aware, however, that all unsaved changes are lost when you switch off the FR-4x or when it is turned off by the **"Auto Off"** function (p. 74.)

So be sure to save everything you want to keep at regular intervals.

1. Select all settings you would like to use for the new own accordion.

You can edit settings such as sound, reverb, and chorus.

➡ **"Selecting Parameters"** (p. 44)

2. Press and hold the [MENU/WRITE] button to jump to the "Write" page.

The following screen appears.

3. Use the [–] [+] buttons to select "SET."

4. Press the [▶] button.

The following screen appears.

5. Use the [–] [+] buttons to select the set that you want to save.

Value	Explanation
ALL, 1–100, WA	Allows you to save Sets (either a specific one or all). • **"All"**: Save all Set • **"1–100"**, **"WA"**: Save the selected Set

6. Press the [▶] button.

The display shows the following screen.

7. Use the [–] [+] buttons to choose whether the parameters in the set's "Common (Set Common)" group will be saved (YES) or will not be saved (NO).

8. Use the [◀] [▶] buttons to select a parameter group, and use the [–] [+] buttons to select the parameters that will be saved.

The parameter groups of a set are listed below.

Parameter/ Display	Value	Explanation
Common 	NO, YES	Select **"Yes"** to save the Common Group parameters (p. 70). Default: **"Yes"** **MEMO** This also includes the Drum Edit and Right Hand Mode settings.
Accordion 	NO, ALL, 1–14	Allows you to save the Accordion registers. • **"No"**: The Accordion registers are not saved. • **"All"**: Save all registers (1–14). (Default). • **"1–14"**: Save the selected register.
Bass 	NO, ALL, 1–7	Allows you to save the Bass registers. • **"No"**: The Bass registers are not saved. • **"All"**: Save all registers (1–7). (Default). • **"1–7"**: Save the selected register.
Free Bass 	NO, ALL, 1–7	Allows you to save the Free Bass registers. • **"No"**: The Free Bass registers are not saved. • **"All"**: Save all registers (1–7). (Default). • **"1–7"**: Save the selected register.
Orch/Organ 	NO, ALL, 1–14	Allows you to save the Orchestra / Organ registers. • **"No"**: The Orchestra / Organ registers are not saved. • **"All"**: Save all Orchestra / Organ registers (Contents of right hand registers 1–14 for the orchestra part and for the organ part) (Default). • **"1–14"**: Save the selected register.
Orchestra Bass 	NO, ALL, 1–7	Allows you to save the Orch. Bass registers. • **"No"**: The Orch. Bass registers are not saved. • **"All"**: Save all registers (1–7). (Default). • **"1–7"**: Save the selected register.
Orchestra Chord 	NO, ALL, 1–7	Allows you to save the Orch. Chord registers. • **"No"**: The Orch. Chord registers are not saved. • **"All"**: Save all registers (1–7). (Default). • **"1–7"**: Save the selected register.
Orchestra FBass 	NO, ALL, 1–7	Allows you to save the Orch. FBass registers. • **"No"**: The Orch. FBass registers are not saved. • **"All"**: Save all registers (1–7). (Default). • **"1–7"**: Save the selected register.

9. Use the [◄][►] buttons to access the "O.F. Bass (Orchestra FBass)" parameter, and then press the [►] button.

A confirmation message appears.

10. Press the [ENTER/YES] button to save the settings.

If you decide to cancel, press the **[EXIT/NO]** button.

Export and Import Sets to/from the Optional USB Flash Drive

The FR-4x allows you to Export or Import Sets to/from a USB flash drive. These functions can be useful either to back-up your Sets or to share your Set with other musicians.

Export Sets to the Optional USB Flash Drive

1. **Insert the optional USB flash drive into the FR-4x USB port.**
2. **In the main screen, press the [MENU] button.**
3. **Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button.**
4. **Use the [◄] [►] buttons to select "Export," and then press the [ENTER/YES] button.**

5. **Press the [ENTER/YES] button.**

The screen for Export settings appears.

6. **If the Type setting is other than "SET," use the [–] [+] buttons to change Type to "SET."**
7. **Press the [►] button to access the "SET File" screen.**

8. **Use the [–] [+] buttons to specify SET File.**

Choose from the values in the table below.

Parameter/ Display	Value	Explanation
SET File 	All	Select **"ALL"** to export All Sets. Also the system parameters will be exported together.
	Single	Select **"Single"** to export the single Set.

If you selected "ALL"

a. **Continue to the step 9.**

If you selected "Single"

a. **Use the [◄] [►] buttons and the [–] [+] buttons to select "Src SET" and specify the set number that you want to export.**

b. **Continue to the step 9**

9. **Press the [►] button.**

The display shows the following screen:

(cursor is blinking)

10. **To enter the name, use the [◄] [►] buttons to move the cursor and use the [–] [+] buttons to select a character.**

➡ **"Assigning a Name"** (p. 20)

11. **Use the [►] button to move the cursor to the far right, and then press the [►] button again.**

A confirmation message appears.

If you decide to cancel, press the **[EXIT/NO]** button.

12. **Press the [ENTER/YES] button to export the set.**

Export begins, and a screen indicating the export progress appears.

When export is completed, the screen indicates **"Complete."**

If a file of the same name already exists, you are asked whether you want to overwrite it.

Press the **[ENTER/YES]** button if you want to overwrite-save the file.

Press the **[EXIT/NO]** button if you want to return to the previous screen.

Import Sets to the Optional USB Flash Drive

1. **Insert the optional USB flash drive that should contain the data to be imported into the FR-4x USB port.**
2. **In the main screen, press the [MENU] button.**
3. **Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button.**
4. **Use the [◄] [►] buttons to select "Import," and then press the [ENTER/YES] button.**

5. **Press the [ENTER/YES] button.**

The screen for Import settings appears.

6. **If the Type setting is other than "SET," use the [–] [+] buttons to change Type to "SET."**

7. Press the [▶] button to access the "SET File" screen.

8. Use the [–] [+] buttons to specify SET File.

Choose from the values in the table below.

Parameter/ Display	Value	Explanation
SET File 	All	Select **"ALL"** to import All Sets. Also the system parameters will be imported together. **NOTE** Selecting this function all Sets in the FR-4x internal memory will be replaced.
	Single	Select **"Single"** to import the single Set.

If you selected "ALL"

a. Press the [▶] button.

The screen indicates the location in the **"MySET"** folder on the USB flash drive.

MEMO

If there is no **"MySET"** folder, the root folder is shown.

If you want to move to another folder, refer to **"How to select the folder"** (p. 36).

How to select the folder

1. To open an existing folder, select it by press the [–] [+] button, then press the [ENTER/YES] button.

Lower line of the screen **"FLDR"** display, it means that the upper line of the name is a folder.

2. Press the [EXIT/NO] button to return to a higher level (i.e. leave the current folder).

Press the **[EXIT/NO]** button at root folder to return to the original screen.

b. Use the [–] [+] buttons to select a file with the "FR4" file name extension.

If the file name does not fit in the screen, it scrolls.

c. Press the [▶] button.

A confirmation message appears.

If you decide to cancel, press the **[EXIT/NO]** button.

d. Press the [ENTER/YES] button.

The display shows the importing is in progress.

When the import is completed, the screen indicates **"Complete."**

If you selected "Single"

a. Press the [▶] button.

The Dest SET screen appears.

b. Use the [–] [+] buttons to specify the import-destination set number.

c. Press the [▶] button.

The screen indicates the location in the **"MySET"** folder on the USB flash drive.

MEMO

If there is no **"MySET"** folder, the root folder is shown.

If you want to move to another folder, refer to **"How to select the folder"** (p. 36).

d. Use the [–] [+] buttons to select a file with the "ST4" file name extension.

If the file name does not fit in the screen, it scrolls.

e. Press the [▶] button.

A confirmation message appears.

If you decide to cancel, press the **[EXIT/NO]** button.

f. Press the [ENTER/YES] button.

The display shows the importing is in progress.

When the import is completed, the screen indicates **"Complete."**

Using the FR-4x USB Audio Player

This section explains how to playback audio songs stored on an optional USB flash drive. New song and rhythm files can be copied to the USB flash drive using your computer.

Getting Ready to Use the FR-4x as a USB Audio Player

1. On your computer, copy the audio songs to an optional USB flash drive.

NOTE

- Use a commercially available USB flash drive or a USB flash drive sold by Roland. However, we cannot guarantee that all commercially available USB flash drives will work with this unit.
- Never turn off the power or remove the USB flash drives or the power cord while the USB flash drive's access indicator is blinking.

2. Connect the USB flash drive to your FR-4x.

File types the FR-4x can read and play back

File format	File Extension	Format
Audio files	mp3	• MPEG-1 Audio Layer 3 • Sampling frequency: 44.1 kHz • Bit rate: 32/40/48/56/64/80/96/112/128/160/192/224/256/320 kbps, VBR (variable bit rate)
	wav	• 16-bit linear • Sampling frequency: 44.1 kHz • Stereo

Caution when Playing Back Audio Files

Playing back an mp3 file of an audio file places a significant processing burden on the FR-4x, and in some cases may cause it to be unable to completely process all of the performance data from the keyboard.

In such cases, using a WAV file instead of mp3 data might relieve the problem.

Selecting a Song on a USB Flash Drive

1. Connect an optional USB flash drive to the FR-4x.

2. Press the [SONG LIST] button.

The display shows the contents of the USB flash drive. If the lower line of the display indicates **"FILE,"** the upper line indicates the file name of the song.

If the lower line of the display indicates **"FLDR,"** the upper line indicates the name of the folder.

3. Use the [–] [+] buttons to select the song that you want to play.

MEMO

If the file that you want to select is inside a folder, select the folder and press the **[ENTER/YES]** button to open the contents of the folder.

If you opened a folder by mistake, press the **[EXIT/NO]** button to return to a higher level.

Press and hold the **[EXIT/NO]** button to return to the main page.

Playing Back a Song from a USB Flash Drive

1. Select a song on the USB flash drive.

➡ **"Selecting a Song on a USB Flash Drive"** (p. 37)

2. Press the [►/II] button to start playback.

The **[►/II]** button's indicator lights and song playback starts.

During song playback, the lower line of the song screen shows the playback position (the time from the beginning).

NOTE

- If the playback of audio file seems too loud or too soft, you may want to change the audio level. See the parameter **"A. FileLv"** (p. 74).
- If you change songs during playback, the playback stops.

MEMO

- Press the **[►/II]** button once again to pause song playback. Its indicator goes dark.
- If the song playback position is later than 1 second, pressing the **[–]** button in the Song screen returns the playback position to the beginning of the song.

Recording Your Performance as Audio Data

Your FR-4x allows you to record your performance and the performance of your band on the optional USB flash drive.

The resulting audio file is stored in the **"MyREC"** folder.

The recording format is WAV (not mp3), which allows you to burn your recordings onto a CD using your computer.

NOTE

- Use a commercially available USB flash drive or a USB flash drive sold by Roland. However, we cannot guarantee that all commercially available USB flash drives will work with this unit.
- Do NOT turn off the power or disconnect the USB flash drive, until the end of the save operation or the cancel operation after the recording.
  Doing so may destroy the data on the USB flash drive.

Recording

1. Insert the optional USB flash drive that should contain your audio recording into the FR-4x USB port.

2. Prepare everything you want to record:

- Select the registers you want to use.
- Set the levels and effects, etc.

3. Press the [REC] button to start recording (its indicator lights).

MEMO

Recording can also be started and stopped with the Function Switches or MIDI foot controller (p. 76).

NOTE

You cannot start recording while the player is playing back a song.

If you try it nevertheless, the display will show the **"Playing!"** message.

4. At the end of the song, press the [REC] button once again to stop recording.

After a while, a screen appears in which you can name the song.

5. Use the [◄] [►] [–] [+] buttons to enter the desired name.

➡ **"Assigning a Name"** (p. 20)

NOTE

The file name is limited to 8 char.

6. Press the [MENU/WRITE] button to save your recording.

The display briefly shows a **"Complete"** message to indicate that the file is saved in the USB flash drive.

If a file of the same name already exists, you are asked whether you want to overwrite it.

To overwrite the file, press the **[ENTER/YES]** button. Press the **[EXIT/NO]** button if you want to return to the name entry screen.

In Case You Decide Not to Save the Audio File

There may be times when you are unhappy about your recording and therefore prefer not to save it. In that case, proceed as follows:

1. If you are still recording, press the [REC] button to stop the recorder.

After a while, a screen appears in which you can name the song.

2. Press the [EXIT/NO] button.

A confirmation message appears.

3. To erase the recorded data, press the [ENTER/YES] button.

Press the **"EXIT/NO"** button if you want to return to the name entry screen.

Listening Your Recording

1. Press the [►/II] button.

The [►/II] button's indicator lights and song playback starts.

MEMO

- If the playback of your audio file seems too loud or too soft, you may want to change the audio level. See the parameter **"A. FileLv"** (p. 74).
- Press the [►/II] button once again to pause song playback. Its indicator goes dark.
- To listen your recording later, see **"Using the FR-4x USB Audio Player"** (p. 37).

Working with User Programs

About the User Program Memory Structure

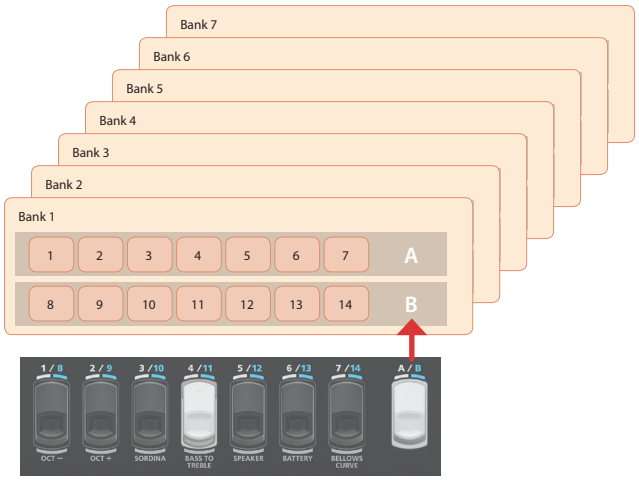
The FR-4x lets you save your favorite sounds and settings, and recall them instantly. The settings you save are called **"user programs."**

This is convenient when you want to switch sounds instantly during a live performance.

The FR-4x can save up to 98 user programs.

You can save 14 user programs in each of seven groups, and use the right hand register buttons to recall these 14 user programs.

You can switch to a different group of 14 programs that can be recalled by using the register buttons. On the FR-4x, these groups are called **"banks."**



All banks of the FR-4x contain user programs for you to enjoy immediately.

You are free to overwrite these with your own settings.

Additionally, if you want to use more than 98 user programs, you can save them on a commercially available USB flash drive, and load that data back into the FR-4x for use.

➡ **"Saving a Set or User Program to a USB Flash Drive (Export)"** (p. 94)

➡ **"Importing a Set or User Program from a USB Flash Drive (Import)"** (p. 94)

Saving an User Program

1. Select the settings that you want to use.

Select a set, specify the sound settings for each part, and make any other necessary changes.

2. Hold down the [MENU/WRITE] button to access the WRITE page.

The following screen appears.

3. Use the [–] [+] buttons to select "UPG."

4. Press the [▶] button.

The following screen appears.

5. Use the [–] [+] buttons to select the bank that you want to save, and then press the [▶] button.

The following screen appears.

6. Use the [–] [+] buttons to select the number that you want to save, and then press the [▶] button.

If an audio file (WAV/MP3) is loaded

The following screen appears.

Specify whether a link to the audio file should be saved in the user program (ON) or not saved (OFF), and then press the [▶] button.

NOTE

File name of the audio file that can be linked to the UPG is only compatible with ASCII code (32-125).

If an audio file (WAV/MP3) is not loaded

Skip to the next step.

7. The following screen appears.

(cursor is blinking)

Assign a name to the user program.

8. To enter a name, use the [◀] [▶] buttons to move the cursor and use the [–] [+] buttons to select a character.

For details, refer to **"Assigning a Name"** (p. 20).

9. Use the [▶] button to move the cursor to the far right, and then press the [▶] button again.

A confirmation message appears.

10. Press the [ENTER/YES] button to save the user program.

A message appears briefly to indicate that data is being written, and then indicates **"Complete"** when saving is complete.

If you decide to cancel, press the **[EXIT/NO]** button.

Recalling a User Program

Here is how to select a User Program.

1. Press the [USER PROGRAM] button.

The **"USER PROGRAM"** indicator below the display is lit.

The display changes, allowing you to recall a user program (User Program Mode).

Bank Number

If no user program has been selected since you turned on the power, the screen indicates **"Select! UPG."**

Selecting from the same bank

If you're selecting a user program from the same group as the bank number of the currently selected user program, you don't need to specify the bank number.

2. Press a right hand register button to select a user program.

You can also use the [–] [+] buttons to switch user programs.

Selecting from another bank

2. Use the [◄] [►] buttons to select the bank of the user program that you want to recall.

3. Press a right hand register button to select a user program.

You can also use the [–] [+] buttons to switch user programs.

MEMO

To return from the state of selecting a user program to the normal state, press the [USER PROGRAM] button once again. The **"USER PROGRAM"** indicator below the display goes dark.

At this time, the lower line of the display indicates **"WA."**

If you re-select the accordion set, this changes to the selected set number.

Export and Import User Programs to/from the Optional USB Flash Drive

The FR-4x allows you to Export or Import User Programs to/from a USB flash drive.

These functions can be useful either to back-up your User Program data or to share your User Program with other musicians.

Export User Programs to the Optional USB Flash Drive

1. Connect your USB flash drive (sold separately) to the FR-4x's USB MEMORY port.

2. Press the [MENU] button.

3. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

4. Use the [◄] [►] buttons to select "Export," and then press the [ENTER/YES] button.

5. Press the [ENTER/YES] button.

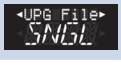
The Export settings screen appears.

6. Use the [–] [+] to set Type to "UPG."

7. Press the [►] button to access the "UPG File" setting screen.

8. Use the [–] [+] buttons to specify the UPG File.

Choose from the values in the table below.

Parameter/ Display	Value	Explanation
UPG File 	ALL	Select **"ALL"** to export All User Programs.
	Bank	Select **"Bank"** to export all User Programs of the selected bank.
	Single	Select **"Single"** to export the single User Program.

If you selected "ALL"

a. Proceed to step 9.

If you selected "Bank"

a. Press the [▶] button.

The display indicates Src Bank, allowing you to select the number of the bank that you want to export.

b. Proceed to step 9.

If you selected "Single"

a. Press the [▶] button.

The display indicates Src Bank, allowing you to select the number of the bank from which you want to export.

b. Press the [▶] button.

The display indicates Src Num, allowing you to select the number of the user program that you want to export.

c. Proceed to step 9.

9. Press the [▶] button.

The display shows the following screen.

(cursor is blinking)

10. To enter a name, use the [◀][▶] buttons to move the cursor and use the [–] [+] buttons to select characters.

For details, refer to **"Assigning a Name"** (p. 20).

11. Use the [▶] button to move the cursor to the far right, and then press the [▶] button again.

A confirmation message appears.

If you decide to cancel, press the **[EXIT/NO]** button.

12. Press the [ENTER/YES] button.

Export begins, and a progress indication is displayed.

When export is completed, a message is shown to indicate completion.

If a file of the same name already exists, a message asks whether you want to overwrite the existing file.

Press the **[ENTER/YES]** button if you want to overwrite-save the file.

Press the **[EXIT/NO]** button if you want to return to the previous screen.

Import User Programs to the Optional USB Flash Drive

1. Insert the optional USB flash drive that should contain the data to be imported into the FR-4x USB port.

2. Press the [MENU] button.

3. Use the [◀] [▶] button to select "Utility," and then press the [ENTER/YES] button (p. 44).

4. Use the [◀] [▶] buttons to select "Import," and then press the [ENTER/YES] button.

5. Press the [ENTER/YES] button.

The Import settings screen appears.

6. Use the [–] [+] to set Type to "UPG."

7. Press the [▶] button to access the "UPG File" setting screen.

8. Use the [–] [+] buttons to make the UPG File setting.

Choose from the values in the table below.

Parameter/ Display	Value	Explanation
UPG File 	ALL	Select **"ALL"** to import All User Programs. **NOTE** Selecting this function all User Programs in the FR-4x internal memory will be replaced.
	Bank	Select **"Bank"** to import all User Programs of the selected bank.
	Single	Select **"Single"** to import the single User Program.

If you selected "ALL"

a. Press the [▶] button.

The screen indicates the location within the **"MyUPG"** folder of the USB flash drive.

MEMO

If there is no **"MyUPG"** folder, the root folder is shown.

If you want to move to another folder, refer to **"How to select the folder"** (p. 36)

b. Use the [–] [+] buttons to select a file that has the "UPA" file name extension.

If the file name does not fit in the screen, it scrolls.

c. Press the [▶] button.

A confirmation message appears.

If you decide to cancel, press the **[EXIT/NO]** button.

d. Press the [ENTER/YES] button.

The display shows a screen indicating that the import is in progress.

When the import is completed, the screen indicates **"Complete."**

If you selected "Bank"

a. Press the [▶] button.

The DestBank screen appears.

b. Use the [–] [+] buttons to specify the import destination bank number.

c. Press the [▶] button.

The screen indicates the location within the **"MyUPG"** folder of the USB flash drive.

MEMO

If there is no **"MyUPG"** folder, the root folder is shown.

If you want to move to another folder, refer to **"How to select the folder"** (p. 36)

d. Use the [–] [+] buttons to select a file that has the "UPB" file name extension.

If the file name does not fit in the screen, it scrolls.

e. Press the [▶] button.

A confirmation message appears.

If you decide to cancel, press the **[EXIT/NO]** button.

f. Press the [ENTER/YES] button.

The display shows a screen indicating that the import is in progress.

When the import is completed, the screen indicates **"Complete."**

If you selected "Single"

a. Press the [▶] button.

The DestBank screen appears.

b. Use the [–] [+] buttons to specify the import destination bank number.

c. Press the [▶] button.

The Dest Num screen appears.

d. Use the [–] [+] buttons to specify the import destination user program number.

e. Press the [▶] button.

The screen indicates the location within the **"MyUPG"** folder of the USB flash drive.

MEMO

If there is no **"MyUPG"** folder, the root folder is shown.

If you want to move to another folder, refer to **"How to select the folder"** (p. 36)

f. Use the [–] [+] buttons to select a file that has the "UPG" file name extension.

If the file name does not fit in the screen, it scrolls.

g. Press the [▶] button.

A confirmation message appears.

If you decide to cancel, press the **[EXIT/NO]** button.

h. Press the [ENTER/YES] button.

The display indicates that import is in progress.

When the import is completed, the screen indicates **"Complete."**

Menu Options

The FR-4x's **[MENU]** button provides access to the available parameters and functions

Selecting Parameters

1. Press the [MENU] button.

The following screen appears.

2. Use the [◄] [►] buttons to select a parameter group.

3. Press the [ENTER/YES] button to enter the selected parameter group.

The following screen appears (the screen that appears depends on the function group that you selected).

In the example shown above, the **"Bass Edit"** group is selected.

4. Use the [◄] [►] buttons to select the parameter that you want to edit.

In the example shown above, the **"Rev Send (Reverb Send)"** is selected.

5. Use the [–] [+] button to edit the value.

The upper line of the screen shows the parameter name; if nothing is shown in the lower line of the screen, you can press the **[ENTER/YES]** button to enter a lower level.

Subsequently, you can repeat step 4.

6. Press the [EXIT/NO] button to return to the parameter group screen.

If you want to edit another parameter, repeat step 2.

MEMO

By long-pressing the **[EXIT/NO]** button you can return to the main screen.

Available Parameters List

NOTE

Some parameter groups cannot be selected if the related section is not activated. For example if the Orchestra section is not activated (**[ORCHESTRA]** button doesn't light), the **"Orchestra Edit"** is not accessible.

Display	Available Parameters
	**Acc Edit** ➡ **"Settings for the Right Hand Accordion Part (Accordion Sounds) (Accordion Edit)"** (p. 45)
	**BassEdit** ➡ **"Left Hand Bass & Chord Part Parameters (Accordion Sounds) (Bass Edit)"** (p. 49)
	**FBasEdit** ➡ **"Left Hand Free Bass Part Parameters (Free Bass Edit)"** (p. 51)
	**OrchEdit** ➡ **"Right Hand Orchestra Part Parameters (Orchestra Edit)"** (p. 53)
	**OrgnEdit** ➡ **"Right Hand Organ Part Parameters (Organ Edit)"** (p. 56)
	**OBasEdit** ➡ **"Left Hand Orchestra Bass Part Parameters (Orchestra Bass Edit)"** (p. 57)
	**OChdEdit** ➡ **"Left Hand Orchestra Chord Part Parameters (Orchestra Chord Edit)"** (p. 60)
	**OFBsEdit** ➡ **"Left Hand Orchestra Free Bass Part Parameters (Orchestra Free Bass Edit)"** (p. 63)
	**DrumEdit** ➡ **"Drum Sound Parameters (Drum Edit)"** (p. 66)
	**RightHnd** ➡ **"Keyboard Mode Parameters for the Right Hand Keyboard (Right Hand Mode)"** (p. 69)
	**SetComon** ➡ **"Parameters Common to the Set (Set Common)"** (p. 70)
	**System** ➡ **"System Settings (System)"** (p. 72)
	**Utility** ➡ **"Convenient Functions (Utility)"** (p. 87)

Important Remark About Saving Your Settings

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off.

This includes situations where the FR-4x is switched off by the **"Auto Off"** function (p. 74).

Remember to save all settings as soon as you are sure that you want to keep them.

- **"Saving an User Program"** (p. 39)
- **"How to Save a Set"** (p. 33)
- **"How to Save System Parameters"** (p. 86)

Settings for the Right Hand Accordion Part (Accordion Sounds) (Accordion Edit)

The parameters of the **"Acc Edit (Accordion Edit)"** group are settings for the right hand accordion part (accordion sounds).

The parameters can be saved to the selected Set.

➡ **"Selecting Tones and Playing with the Right Hand"** (p. 21)

➡ **"Selecting Parameters"** (p. 44)

Introduction to Accordion Parameters

Make settings for the right hand accordion sound.

You can make various settings for the selected set, including reed settings such as the musette detune of the right hand accordion sound, as well as the bellows and effects.

By editing these parameters, you can customize the accordion to your own taste just as if you were an accordion builder.

The changes here are applied to the sound of the register that is selected by the accordion part.

First, turn on the right hand accordion part and press a right hand register button **[1/8]–[7/14]** to select a right hand accordion sound; now you can edit the settings.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

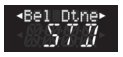
See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Accordion parameters

Parameter	Explanation/Value
MusetTyp (Musette Detune Type)	This parameter allows you to choose the musette detune type. ➡ **"Musette Detune"** (p. 30)
	 Off
	 Dry
	 Classic
	 F-Folk
	 American_L
	 American_H
	 North_Europe
	 German_L
	 D Folk_L
	 Italian_L
	 German_H

Parameter	Explanation/Value
MusetTyp (Musette Detune Type)	 Alpine
	 Italian_H
	 D-Folk_H
	 French
	 Scottish
MusetVal (Musette Detune Value)	Specify how prominent the musette detune should be.
	 -100–Std–+100
ValveTyp (Valve Noise Type)	This parameter allows you to set type of the valve noises. **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun
	 Jazz
	 F-Folk
	 D-Folk
	 Organetto
	 F-Folk2
	 Classic2
	 Studio
	 Tradition
	 Steierische
	 OldItaly
	 TexMex
	 Trikitixa
ValveTyp (Valve Noise Type)	 F-Jazz
	 Classic3
	 Bajan

Parameter	Explanation/Value
Valve Lv (Valve Noise Level)	Use the LEVEL parameter to specify how prominent the noise should be.
	 Off, -40–Std–+40
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	Use these parameters to set the Reverb or Chorus send levels (how much effect should be applied to the accordion section).
	 0–127
	 0–127
Release (Release Time)	This parameter that allows you to shorten the right hand accordion sounds if you feel the virtual reeds linger a bit long after you release a key. To do so, select a negative value.
	 -64–0–63
Bel Dtne (Bellows Detune)	Here, you can specify how strongly the pitch of the simulated Treble reed(s) changes when you open or close the bellows faster than usual. This parameter further adds to the realism of the sounds emulated by your FR-4x. If the **"Standard"** setting seems too mild, try **"High."** If it is too strong, use **"Low."** If you don't want any detuning effect, select **"Off."**
	 Off
	 Low
	 Standard
	 High
MIDI Tx (MIDI Tx)	When you press the **[ENTER/YES]** button, you can have MIDI TX about setting of accordion part.

MIDI TX

This page contains a series of MIDI parameters for the selected register.

You need to set them one by one. These parameters are saved along with all other Set parameters, which allows you to use diff erent MIDI settings for each Set – and even each register within a Set.

Parameter	Explanation/Value
Note Tx (Note Tx)	This parameter specifies whether note messages of the right hand keyboard are transmitted via MIDI. If this is **"Off,"** note-on messages are not transmitted via MIDI. Turn this setting **"Off"** if you don't want notes played on the right hand keyboard to be sounded by an external MIDI-connected device.
	 On, Off (Default: On)

Parameter	Explanation/Value
Octave (Octave)	This parameter allows you to transpose the Note-on messages transmitted by the accordion section (if **"Note Tx"** is set to **"On"**) up to three octaves up or down. Each MIDI note has a unique number. This parameter allows you to add (or subtract) 12 (**"1"** octave), 24 (**"2"** octaves) or 36 (**"3"** octaves) to (from) the note numbers generated by your playing.  -3–0–+3 (Default: 0)
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If you choose **"Std,"** pressing a left hand register button will transmit a PC message of the same value as the left hand register button number, a CC00 message of **"0,"** and a CC32 message of **"0."**  Std, Off, 0–127 (Default: Std)  Std, Off, 0–127 (Default: Std)  Std, Off, 1–128 (Default: Std)
Volume (Volume)	This parameter allows you to specify the volume value (CC07) the register should send to an external device whenever you press it. That way, the MIDI instrument you are controlling is automatically set to the desired level. Remember that selecting **"0"** silences the receiving MIDI instrument. Select **"Off"** if the register should not transmit this message. **NOTE** The FR-4x does not execute this message if it is returned to the FR-4x via the external device's **"Soft Thru"** function.  Off, 0–127 (Default: 100)
Panpot (Panpot)	This parameter allows you to specify the value (CC10) the register should send to an external device when you press it. That way, the MIDI instrument you are controlling automatically selects the desired stereo position. **"0"**corresponds to hard left, **"64"** to dead center, and **"127"** to hard right. Select **"Off"** if the register should not transmit this message. **NOTE** The FR-4x does not execute this message if it is returned to the FR-4x via the external device's **"Soft Thru"** function.  Off, 0–127 (Default: 64)

Parameter	Explanation/Value
Reverb (Reverb)	This parameter allows you to specify the Reverb Send Level value (CC91) the register should send to an external device when you press it. Selecting **"0"** will set the receiving MIDI instrument to **"dry"** (no reverb), while**"127"** represents the maximum Reverb Send level. Select **"Off"** if the register should not transmit this message. **NOTE** • If there is no audible change, you may have to check the reverb effect settings on the receiving MIDI instrument. • Not all MIDI instruments have a reverb effect, and even if they do, they may not support this control change number.  Off, 0–127 (Default: 40)
Chorus (Chorus)	This parameter allows you to specify the Chorus Send Level value (CC93) the register should send to an external device whenever you press it. **"0"** will set the receiving MIDI instrument to **"dry"** (no chorus), while **"127"** represents the maximum Chorus Send level. Select **"Off"** if the register should not transmit this message. **NOTE** • If there is no audible change, you may have to check the reverb effect settings on the receiving MIDI instrument. • Not all MIDI instruments have a chorus effect, and even if they do, they may not support this control change number.  Off, 0–127 (Default: 40)

Parameter	Explanation/Value
Velocity (Velocity)	Your FR-4xx is velocity sensitive. The volume and brightness of the notes you play on the right hand or left hand keyboard therefore depend on how hard (or fast) you press the keys/buttons. The accordion sounds do not respond to these playing dynamics, but the Orchestra (Treble, Bass, Chord, Free Bass) sounds do and so do most MIDI-compatible sound modules. Even though the MIDI standard recognizes 128 different velocity values, only 127 can actually be used for expression purposes. That explains why the setting range is 1–127. Value **"0"** is usually used to signal the end of a note (i.e. when you release a key or button). This parameter allows you to specify whether the velocity values corresponding to the strength with which you press a key/button should be transmitted (**"On"**) or whether your playing dynamics should not be translated as such. In the latter case, you need to select a value (1–127) that will be applied to all notes that are transmitted via MIDI. **"64"** is still relatively soft. Even lower values are probably not what you want in most cases. Fixed velocity values can be useful for playing organ sounds on an external module. Note that the setting you select here has no effect when the **"Note Tx"** parameter is set to **"Off,"** because note numbers are always transmitted along with a velocity value (any value different from **"0"** also means **"start playing this note"**).  On, 1–127 (Default: On)
Express (Expression)	Specifies how expression messages (CC11) are transmitted. If you want movements of the FR-4x's bellows to transmit expression messages, choose the **"Bellows"** setting. If you want to use a MIDI foot controller such as the FC-300 to transmit expression messages, choose the **"Pedal"** setting. If you don't want to transmit expression messages, choose the **"Off"** setting. (Default: Bellows)  Off  Bellows  Pedal

Parameter	Explanation/Value
SustainA (Sustain A)	This parameter allows you to enable the transmission of sustain values (CC64) to an external device. The sustain can be controlled by Function Switches (p. 76) or by an optional MIDI foot controller (e.g. FC-300) connected to the MIDI IN connector of FR-4x (p. 80). **NOTE** This parameter belongs to the system parameters. This means that its setting is not affected by changes in the set or the user program. To save this parameter, save it as a system parameter. ➡ **"How to Save System Parameters"** (p. 86)  Off, On (Default: On)

Left Hand Bass & Chord Part Parameters (Accordion Sounds) (Bass Edit)

The parameters of the **"BassEdit (Bass Edit)"** group are settings for the left hand bass & chord part (accordion sound).

The parameters can be saved to the selected Set.

➡ **"Bass and Chord System (BASS & CHRD)"** (p. 23)

➡ **"Selecting Parameters"** (p. 44)

NOTE

These parameters cannot be selected if the Free Bass section is activated.

Introduction to Bass Parameters

These parameters apply to the sound of the register that is selected for the bass & chord part.

Before you select a parameter and begin editing it, press the LEFT HAND **[BASS & CHORD]** button to turn on the bass & chord part, and then press a left hand register button to select the sound that you want to edit.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

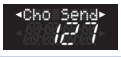
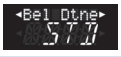
See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Bass parameters

Parameter	Explanation/Value
ChrdToBs (Chord To Bass)	**"Off"**: The reed sound (8'-4', 4', 2') for chord row does not sound in the bass row. **"On"**: The reed sound (8'-4', 4', 2') for chord row sounds in the both of the bass row and the chord row.
	 Off, On
BtnNsTyp (Button Noise Type)	On most acoustic accordions, the left hand part is played using a button keyboard, and a distinctive noise is heard when a button is pressed. Here you can specify the type of that noise. You can specify a different type of noise for each sound. **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun

Parameter	Explanation/Value
BtnNsTyp (Button Noise Type)	 Jazz
	 F-Folk
	 D-Folk
	 Organetto
	 F-Folk2
	 Classic2
	 Studio
	 Tradition
	 Steierische
	 Trikitixa
	 F-Jazz
	 Classic3
	 Bajan
BtnNs Lv **(Button Noise Level**	Specifies the volume of the button noise.
	 Off, –40–Std–40
RdGrwTyp (Reed Growl Type)	This parameter allows you to simulate the typical noise a bass reed makes just before it stops vibrating altogether. Each instrument of the accordion family produces its own typical growl. **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun
	 Jazz
	 F-Folk
	 D-Folk
	 Organetto
	 F-Folk2
	 Classic2

Parameter	Explanation/Value
RdGrwTyp (Reed Growl Type)	 Studio
	 Tradition
	 Steierische
	 Trikitixa
	 F-Jazz
	 Classic3
	 Bajan
RdGrw Lv (Reed Growl Level)	To set the volume of the Reed Growl sound.
	 Off, –40–Std–40
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	Use these parameters to set the Reverb or Chorus, send levels (how much effect should be applied to the bass section). The higher the value you set, the more the bass section (which includes the chord buttons) will be processed by the effect in question.
	 0–127
	 0–127
Bel Dtne (Bellows Detune)	Here, you can specify how strongly the pitch of the simulated Bass reed(s) changes when you open or close the bellows faster than usual. If the **"Standard"** setting seems too mild, try **"High."** If it is too strong, use **"Low."** If you do not want any detuning effect, select **"Off."** The most convincing setting usually depends on the selected instrument(s).
	 Off
	 Low
	 Standard
	 High
B.MIDITX (Bass MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the bass part.
C.MIDITX (Chord MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the chord part.

MIDI TX

These parameters specify MIDI transmission for the currently selected bass & chord part.

MIDI settings are made separately for the left hand bass buttons and chord buttons.

These settings can be saved for each set, and you can use different MIDI settings for each register within the set.

BASS MIDI TX

Parameter	Explanation/Value
Note Tx (Note Tx) **Octave** (Octave)	For details, refer to Accordion Edit - MIDI TX (p. 46).
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If you choose **"Std,"** pressing a left hand register button will transmit a PC message of the same value as the left hand register button number, a CC00 message of **"0,"** and a CC32 message of **"0."**
	 Std, Off, 0–127
	 Std, Off, 0–127
	 Std, Off, 1–128
Volume (Volume) **Panpot** (Panpot) **Reverb** (Reverb) **Chorus** (Chorus) **Velocity** (Velocity) **Express** (Expression)	For details, refer to Accordion Edit - MIDI TX (p. 46).
SustainA (Sustain A)	This parameter allows you to enable the transmission of sustain values (CC64) to an external device. The sustain can be controlled by Function Switches (p. 76) or by an optional MIDI foot controller (e.g. FC-300) connected to the MIDI IN connector of FR-4x (p. 80). **NOTE** This parameter belongs to the system parameters. This means that its setting is not affected by changes in the set or the user program. To save this parameter, save it as a system parameter. ➡ **"How to Save System Parameters"** (p. 86)
	 Off, On (Default: Off)

CHORD MIDI TX

Parameter	Explanation/Value
Note Tx (Note Tx)	For details, refer to Accordion Edit - MIDI TX (p. 46).
Octave (Octave)	
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If you choose **"Std,"** pressing a left hand register button will transmit a PC message of the same value as the left hand register button number, a CC00 message of **"0,"** and a CC32 message of **"0."**
	 Std, Off, 0–127
	 Std, Off, 0–127
	 Std, Off, 1–128
Volume (Volume)	For details, refer to Accordion Edit - MIDI TX (p. 46).
Panpot (Panpot)	
Reverb (Reverb)	
Chorus (Chorus)	
Velocity (Velocity)	
Express (Expression)	
SustainA (Sustain A)	This parameter allows you to enable the transmission of sustain values (CC64) to an external device. The sustain can be controlled by Function Switches (p. 76) or by an optional MIDI foot controller (e.g. FC-300) connected to the MIDI IN connector of FR-4x (p. 80). **NOTE** This parameter belongs to the system parameters. This means that its setting is not affected by changes in the set or the user program. To save this parameter, save it as a system parameter. ➡ **"How to Save System Parameters"** (p. 86)
	 Off, On (Default: Off)

Left Hand Free Bass Part Parameters (Free Bass Edit)

The parameters of the **"FBasEdit (Free Bass Edit)"** group are settings for the left hand free bass part (accordion sound).

The parameters can be saved to the selected Set.

➡ **"Free Bass Mode (F.BASS)"** (p. 24)

➡ **"Selecting Parameters"** (p. 44)

NOTE

These parameters can only be selected if the Free Bass section is activated (**[FBASS]** button indicator lights).

Introduction to Free Bass Parameters

These settings apply to the sound of the register that is selected for the free bass part.

Before you select a parameter and begin editing it, press the LEFT HAND **[F.BASS]** button to turn on the free bass part, and then press a left hand register button to select the sound that you want to edit.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
BtnNsTyp (Button Noise Type)	The bass section of almost all accordion instruments can be played via buttons. Such buttons produce a typical noise when pressed. You can select the instrument whose button noises should be used when you select this register. (Note that other registers can be assigned different noises.) **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun
	 Jazz
	 F-Folk
	 D-Folk
	 Organetto

Parameter	Explanation/Value
BtnNsTyp (Button Noise Type)	 F-Folk2
	 Classic2
	 Studio
	 Tradition
	 Steierische
	 Trikitixa
	 F-Jazz
	 Classic3
	 Bajan
BtnNs Lv (Button Noise Level)	Specifies the volume of the button noise.
	 Off, –40–Std–40
RdGrwTyp (Reed Growl Type)	This parameter allows you to simulate the typical noise a bass reed makes just before it stops vibrating altogether. Each instrument of the accordion family produces its own typical growl. **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun
	 Jazz
	 F-Folk
	 D-Folk
	 Organetto
	 F-Folk2
	 Classic2

Parameter	Explanation/Value
RdGrwTyp (Reed Growl Type)	 Studio
	 Tradition
	 Steierische
	 Trikitixa
	 F-Jazz
	 Classic3
	 Bajan
RdGrw Lv (Reed Growl Level)	Specifies the volume of the Reed Growl sound.
	 Off, –40–Std–40
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	Use these parameters to set the Reverb or Chorus send levels (how much effect should be applied to the Free Bass section). The higher the value you set, the more the Free Bass section (which includes the chord buttons) will be processed by the effect in question.
	 0–127
	 0–127
Bel Dtne (Bellows Detune)	Here, you can specify how strongly the pitch of the simulated Free Bass reed(s) changes when you open or close the bellows faster than usual. If the **"Standard"** setting seems too mild, try **"High."** If it is too strong, use **"Low."** If you do not want any detuning effect, select **"Off."** The most convincing setting usually depends on the selected instrument(s).
	 Off
	 Low
	 Standard
	 High
MIDI TX (MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the free bass part.

MIDI TX

These parameters specify MIDI transmission for the free bass part.

These parameters can be saved for each set, and you can use different MIDI settings for each register within the set.

Parameter	Explanation/Value
Note Tx (Note Tx)	For details, refer to Accordion Edit - MIDI TX (p. 46).
Octave (Octave)	
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If you choose **"Std,"** pressing a left hand register button will transmit a PC message of the same value as the left hand register button number, a CC00 message of **"0,"** and a CC32 message of **"1."**
	 Std, Off, 0–127
	 Std, Off, 0–127
	 Std, Off, 1–128
Volume (Volume)	For details, refer to Accordion Edit - MIDI TX (p. 46).
Panpot (Panpot)	
Reverb (Reverb)	
Chorus (Chorus)	
Velocity (Velocity)	
Express (Expression)	

Right Hand Orchestra Part Parameters (Orchestra Edit)

The parameters of the **"OrchEdit (Orchestra Edit)"** group are settings for the right hand orchestra part.

The parameters can be saved to the selected Set.

➡ **"Selecting Tones and Playing with the Right Hand"** (p. 21)

➡ **"Selecting Parameters"** (p. 44)

NOTE

These parameters can only be selected if the Orchestra section is activated (**[ORCHESTRA]** button indicator lights).

Introduction to Orchestra Parameters

These settings apply to the sound of the register that is selected for the orchestra part.

Before you select a parameter and begin editing it, press the RIGHT HAND **[ORCHESTRA]** button to turn on the orchestra part, and then press a right hand register button **[1/8]**–**[7/14]** to select the sound that you want to edit.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

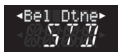
See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
(Tone)	This parameter allows you to assign the desired orchestral sound to the selected register. The upper line of the screen shows the sound name, and the lower line shows the orchestra sound number. **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ For expansion sounds, the memory area is indicated by an A-D at the far left of the bottom line in the screen.
	 ➡ **"Tone & Drum Kit List"**
Octave (Octave)	This parameter allows you to transpose the Orchestra section (i.e. the currently selected orchestral sound) up or down. This can be interesting when you are using the Orchestra part in layer mode (p. 26) and want it to sound above or below the selected treble accordion register.
	 –3–0–+3

Parameter	Explanation/Value
Volume (Volume)	This parameter allows you to set the Orchestra section's volume. This setting is a value relative to the standard **"Std"** setting.  Off, –40–Std–40
Panpot (Panpot)	Depending on the selected sound, this parameter allows you to change the Orchestra part's placement in the stereo sound field (i.e. between the left and right speakers) to create a livelier sound image. The **"TR"** (Treble) values mean that the sound will appear on the same side as the Right Hand (treble) accordion sound. This setting applies to both the FR-4x internal speakers and the L/MONO jack. The **"BS"** values mean that the sound will appear on the same side as the bass accordion sound. This setting applies to both the FR-4x internal speakers and the R/ MONO jack.  BS63–0–TR63
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	Use these parameters to set the Reverb or Chorus send levels (how much effect should be applied to the Orchestra section).  0–127  0–127
Attack (Attack time)	This parameter adjusts the onset of the sound. Negative values speed up the attack, so that the sound becomes more aggressive. **MEMO** The envelope parameters affect both the volume (TVA) and the filter (TVF).  -64–0–+63
Decay (Decay time)	This parameter adjusts the time over which the sound's volume and cutoff frequency fall from the highest point of the attack down to the sustain level. **MEMO** The envelope parameters affect both the volume (TVA) and the filter (TVF).  -64–0–+63
Release (Release time)	This parameter adjusts the time over which the sound will decay after the note is released until it is no longer heard. The cutoff frequency will also fall according to this setting. **MEMO** The envelope parameters affect both the volume (TVA) and the filter (TVF).  -64–0–+63

Parameter	Explanation/Value
Cutoff (Cutoff)	This filter parameter allows you to make the selected sound darker or brighter. Positive settings mean that more overtones will be allowed to pass, so that the sound becomes brighter. The further this value is set in the negative direction, the fewer overtones will be allowed to pass and the sound will become softer (darker). **NOTE** For some sounds, positive (+) Cutoff settings will cause no noticeable change because the pre-programmed Cutoff parameter is already set to its maximum value.  -64–0–+63
Reso (Resonance)	When the Resonance value is increased, the overtones in the area of the cutoff frequency will be emphasized, creating a sound with a strong character. **NOTE** For some sounds, negative (–) Resonance settings may produce no noticeable change because the Resonance is already set to the minimum value.  -64–0–+63
Vib Dly (Vibrato Delay)	This parameter adjusts the time required for the vibrato effect to begin. Positive (+) settings increase the time before vibrato will begin and negative settings shorten the time.  -64–0–+63
Vib Dept (Vibrato Depth)	This parameter adjusts the strength of vibrato (pitch modulation). Positive (+) settings mean that the **"wobble"** becomes more prominent, while negative (–) settings make it shallower.  -64–0–+63
Vib Rate (Vibrato Rate)	This parameter adjusts the speed of vibrato (pitch modulation). Positive (+) settings make the preset pitch modulation faster and negative (–) settings make it slower.  -64–0–+63
Bel Dtne (Bellows Detune)	This parameter allows you to specify how strongly the orchestral sound's pitch should be influenced by opening and closing the bellows faster than usual. If the **"Standard"** setting seems too mild, try **"High."** If it is too strong, use **"Low."** If you do not want any detuning effect, select **"Off."** The most convincing setting usually depends on the selected sound.  Off

Parameter	Explanation/Value
Bel Dtne (Bellows Detune)	 Low
	 Standard
	 High
ExpPedal (Expression Pedal)	Select **"Off"** If you want to use the bellows for expressive purposes. Select **"On"** if you want to control the expression by foot purchasing an optional MIDI foot controller (e.g. FC-300).
	 Off, On
Touch (Touch)	This parameter allows you to specify the velocity sensitivity of the Right Hand section keys when they are used to play Orchestral sounds. **NOTE** • Only when you select a tone that can be controlled only by the keyboard, you can set the **"Touch"** (When a tone that can not be set is selected it will be displayed as **"----"**). For details regarding these sounds refer to the**"Tone & Drum Kit List"** supplementary manual. ➡ **http://www.roland.com/manuals/** • There are several sounds which the difference in the velocities is incomprehensible.
	 **"FIX.L (Fixed Low)"**: The velocity value will always be 50 (0x32) regardless of the strength with which you play the keyboard.
	 **"FIX.M (Fixed Med)"**: The velocity value will always be 80 (0x50) regardless of the strength with which you play the keyboard.
	 **"FIX.H (Fixed High)"**: The velocity value will always be 127 (0x7F) regardless of the strength with which you play the keyboard.
	 **"LOW (Low)"**: The velocity value will not be less than 33 (0x21) even when you play the most weak keyboard. You get a certain amount of volume even if you play lightly on the keyboard.
	 **"MED (Medium)"**: The velocity value will not be less than 17 (0x11) even when you play the most weak keyboard. This is the middle of the **"Low"**and the **"High."**

Parameter	Explanation/Value
Touch (Touch)	 **"HIGH (High)"**: The velocity value is controlled in the range of 1 (0x01) ~ 127 (0x7F) by the strength with which you play the keyboard.This setting is the most wide range of velocity control.
	 **"F.L+B (Fixed Low+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 20 (0x14).
	 **"F.M+B (Fixed Med.+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 50 (0x32).
	 **"F.H+B (Fixed High+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 80 (0x50).
	 **"BELW (Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard.
Poly (Polyphonic)	**"On"**: You can play chords using the selected part. **"Off (Mono)"**: You can play only one note at a time. You might select this mode to play a trumpet or woodwind sound in a natural style.
	 On, Off (Mono)
PortTime (Portamento Time)	Instead of changing in semitone steps, the pitch glides from one note to the next whenever **"PORT.TIME"** is higher than **"0."** The higher the value, the slower the glide. This effect is particularly useful for synthesizer sounds.
	 0–127
MIDI TX (MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the orchestra part.

MIDI TX

These parameters specify MIDI transmission for the orchestra part.

These settings can be saved for each set, and you can use different MIDI settings for each register within the set.

Parameter	Explanation/Value
Note Tx (Note Tx)	For details, refer to **"Accordion Edit - MIDI TX"** (p. 46).
Octave (Octave)	
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If **"Std"** is selected, pressing a right hand register button transmits a PC message of the same number as the right hand register button, a CC00 message of **"0,"** and a CC32 message of **"0."** **MEMO** These settings are shared with the Organ part. In the case of the Organ part, CC32 is transmitted as **"1."**
	 Std, Off, 0–127
	 Std, Off, 0–127
	 Std, Off, 1–128
Volume (Volume)	For details, refer to **"Accordion Edit - MIDI TX"** (p. 46).
Panpot (Panpot)	
Reverb (Reverb)	
Chorus (Chorus)	
Velocity (Velocity)	
Express (Expression)	

Right Hand Organ Part Parameters (Organ Edit)

The parameters in the **"OrgnEdit (Organ Edit)"** group are for the right hand organ part. The parameters can be saved to the selected Set.

➡ **"Selecting Tones and Playing with the Right Hand"** (p. 21)
➡ **"Selecting Parameters"** (p. 44)

NOTE

These parameters can only be selected if the Organ section is activated (**[ORGAN]** button indicator lights).

Introduction to Organ Parameters

These settings are for the sound of the register that's selected for the organ part.

Before you select a parameter and begin editing it, press the RIGHT HAND **[ORGAN]** button to turn on the organ part, and then press a right hand register button **[1/8]**–**[7/14]** to select the sound that you want to edit.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

NOTE

The Organ section and the Orchestra section cannot be used at the same time.

Parameter	Explanation/Value
(VTW Preset)	Select the Organ preset that you wish to assign to the selected register. The upper line of the screen shows the organ sound name, and the lower line shows the organ sound number. • **"Usr"**: This setting is the most recent of the stored VTW organ tone. • **"1"**–**"32"**: 32 Organ preset (Not editable) **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ • **"USR"** is selected in the VTW organ tone at the time of start-up.
	 Usr, 1–16
Volume (Volume)	This parameter allows you to set the level of the Organ section. This setting is a value relative to the standard **"Std"** setting.
	 Off, -40–Std–+40

Left Hand Orchestra Bass Part Parameters (Orchestra Bass Edit)

The parameters in the **"OBasEdit (Orchestra Bass Edit)"** group are for the orchestra sound and VTW organ sound of the left hand orchestra bass part.

The parameters can be saved to the selected Set.

➡ **"Playing Orchestral Sounds"** (p. 25)

➡ **"Selecting Parameters"** (p. 44)

NOTE

These parameters can only be selected if the Orchestra Bass section is activated (**[ORCH BASS]** button indicator lights).

Introduction to Orchestral Bass Parameters

These settings are for the sound of the register that is selected for the orchestra bass part.

Before you select a parameter and begin editing it, press the LEFT HAND part's **[ORCH BASS]** button to turn on the orchestra bass part, and then press a left hand register button **[1]**–**[7]** to select the sound that you want to edit.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
(Tone)	This parameter allows you to assign the desired orchestral and VTW Organ sound to the selected register. The VTW Organ Sound is the first in the Orchestra Tone List. The upper line of the screen shows the sound name, and the lower line shows the orchestra sound number. **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ For expansion sounds, the memory area is indicated by an A-D at the far left of the bottom line in the screen.
	 ➡ **"Tone & Drum Kit List"**

Parameter	Explanation/Value
(VTW Preset)	**(Only for VTW Organ Tone)** Select the Organ preset that you wish to assign to the selected register. **"Usr"**: This setting is the most recent of the stored VTW organ tone. **"1"–"16"**: 16 Organ preset (Not editable) **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ • **"USR"** is selected in the VTW organ tone at the time of start-up.
	 Usr, 1–16
LowestNt (Lowest Note)	This parameter allows you to specify the lowest note the selected sound can sound. ➡ **"About Lowest Note"** (p. 59) **MEMO** The FR-4x's display indicates a sharp symbol "#" as "♯."
	 E, F, F#, G, Ab, A, Bb, B, C, C#, D, Eb
Octave (Octave)	This parameter allows you to transpose the Orchestra Bass section (i.e. the selected orchestral or organ sound) up or down. Use it if the part you want to play with the bass buttons is too low or too high for what you have in mind.
	 –3–0–+3
Volume (Volume)	This parameter allows you to set the level of the Orchestra Bass part.
	 Off, –40–Std–40
Panpot (Panpot)	**(Not for VTW Organ Tone)** Depending on the selected sound, this parameter allows you to change the Orchestra Bass part's placement in the stereo sound field (i.e. between the left and right speakers) to create a livelier sound image. The **"TR"** values mean that the sound will appear on the same side as the Right Hand (treble) accordion sound. This setting applies to both the FR-4x's internal speakers and the L/MONO jack. The **"BS"** values mean that the sound will appear on the same side as the bass accordion sound (which is not available while an Orchestra Bass sound is being used). This setting applies to both the FR-4x's internal speakers and the R/MONO jack. Choose **"0"** if the Orchestra Bass sound should be at the center of the stereo image.
	 BS63–0–TR63

Parameter	Explanation/Value
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	**(Not for VTW Organ Tone)** Use these parameters to set the Reverb or Chorus send levels (how much effect should be applied to the Orchestra Bass section).
	 0–127
	 0–127
Attack (Attack time) **Decay** (Decay time) **Release** (Release time) **Cutoff** (Cutoff) **Reso** (Resonance) **Vib Dly** (Vibrato Delay) **Vib Dept** (Vibrato Depth) **Vib Rate** (Vibrato Rate)	**(Not for VTW Organ Tone)** ➡ **"Right Hand Orchestra Part Parameters (Orchestra Edit)"** (p. 53)
	 -64–0–+63
	 -64–0–+63
	 -64–0–+63
	 -64–0–+63
	 -64–0–+63
	 -64–0–+63
	 -64–0–+63
	 -64–0–+63
ExpPedal (Expression Pedal)	Select **"Off"** If you want to use the bellows for expressive purposes. Select **"On"** if you want control the expression by foot purchasing an optional MIDI foot controller (e.g. FC-300).
	 Off, On
Touch (Touch)	**(Not for VTW Organ Tone)** This parameter allows you to specify the velocity sensitivity of the Left Hand section keys when they are used to play Orchestral Bass sounds. **NOTE** • Only when you select a tone that can be controlled only by the keyboard, you can set the **"Touch"** (When a tone that can not be set is selected it will be displayed as **"----"**). For details regarding these sounds refer to the **"Tone & Drum Kit List"** supplementary manual. ➡ http://www.roland.com/manuals/ • It has no effect on the VTW Organ sounds. • There are several sounds which the difference in the velocities is incomprehensible.
	 **"FIX.L (Fixed Low)"**: The velocity value will always be 50 (0x32) regardless of the strength with which you play the keyboard.

Parameter	Explanation/Value
Touch (Touch)	 **"FIX.M (Fixed Med)"**: The velocity value will always be 80 (0x50) regardless of the strength with which you play the keyboard.
	 **"FIX.H (Fixed High)"**: The velocity value will always be 127 (0x7F) regardless of the strength with which you play the keyboard.
	 **"LOW (Low)"**: The velocity value will not be less than 33 (0x21) even when you play the most weak keyboard. You get a certain amount of volume even if you play lightly on the keyboard.
	 **"MED (Medium)"**: The velocity value will not be less than 17 (0x11) even when you play the most weak keyboard. This is the middle of the **"Low"**and the **"High."**
	 **"HIGH (High)"**: The velocity value is controlled in the range of 1 (0x01) ~ 127 (0x7F) by the strength with which you play the keyboard.This setting is the most wide range of velocity control.
	 **"F.L+B (Fixed Low+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 20 (0x14).
	 **"F.M+B (Fixed Med.+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 50 (0x32).
	 **"F.H+B (Fixed High+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 80 (0x50).
	 **"BELW (Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard.
Poly (Polyphonic) **PortTime** (Portamento Time)	**(Not for VTW Organ Tone)** For details, refer to **"Orchestra Edit - Poly/Mono"** (p. 55)/**"Orchestra Edit - Portament Time"** (p. 55).

Parameter	Explanation/Value
MIDI TX (MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the orchestra bass part.

MIDI TX

These parameters specify MIDI transmission for the orchestra bass part.

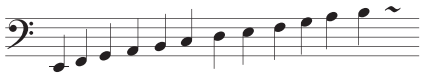
These settings can be saved for each set, and you can use different MIDI settings for each register within the set.

Parameter	Explanation/Value
Note Tx (Note Tx)	For details, refer to **"Accordion Edit - MIDI TX"** (p. 46).
Octave (Octave)	
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If you choose **"Std,"** pressing a left hand register button will transmit a PC message of the same value as the left hand register button number, a CC00 message of **"0,"** and a CC32 message of **"0."**
	 Std, Off, 0–127
	 Std, Off, 0–127
	 Std, Off, 1–128
Volume (Volume)	For details, refer to **"Accordion Edit - MIDI TX"** (p. 46).
Panpot (Panpot)	
Reverb (Reverb)	
Chorus (Chorus)	
Velocity (Velocity)	
Express (Expression)	

About Lowest Note

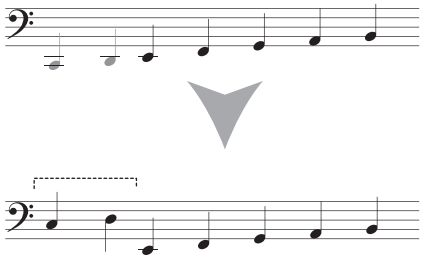
The ORCHESTRA BASS sounds (like the orchestral sounds of the treble section) are PCM waveforms (samples) of acoustic instruments. Each acoustic instrument has a set range: it cannot sound notes below or above that range.

A normally tuned 4-string bass guitar allows you to play a low E, but not the D below it, for instance:



Samples (PCM waveforms), on the other hand, can lower the pitch of a recorded sound almost indefinitely. But that doesn't sound very natural. The **"Lowest Note"** parameter allows you to specify the lowest pitch the sample can use. If you nevertheless play a lower note on the bass keyboard, it will be sounded one octave above the corresponding pitch and sound natural. Here is an example:

If this is what you play on the bass keyboard–



–after choosing... Lowest Note = E

–these notes are transposed 1 octave up

The Orchestra Bass sound thus changes octaves. For some songs, the default setting (E) may yield odd results, especially if you need to play walking bass lines, etc. In that case, you can change the **"LowestNt (Lowest Note)"** setting to achieve a satisfactory result.

Left Hand Orchestra Chord Part Parameters (Orchestra Chord Edit)

The parameters in the **"OChdEdit (Orchestra Chord Edit)"** group are for the orchestra sound and VTW organ sound of the left hand orchestra chord part.

The parameters can be saved to the selected Set.

➡ **"Playing Orchestral Sounds"** (p. 25)

➡ **"Selecting Parameters"** (p. 44)

NOTE

Orchestral Chord Edit parameters can be selected only if bass & chord is on (**[BASS & CHRD]** button is lit or blinking) and the orchestra chord part is on (**[ORCH BASS]** button is lit).

Introduction to Orchestra Chord Parameters

These settings are for the sound of the register that is selected for the orchestra chord part.

Before you select a parameter and begin editing it, press the LEFT HAND part's **[ORCH CHORD/F.BASS]** button to turn on the orchestra chord part, and then press a left hand register button **[1]**–**[7]** to select the sound that you want to edit.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

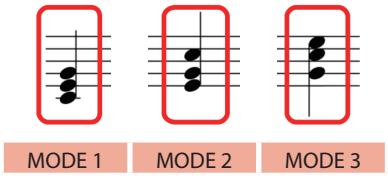
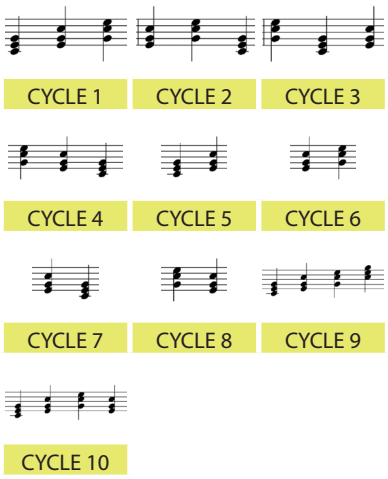
See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
(Tone)	This parameter allows you to assign the desired orchestral and VTW Organ sound to the selected register. The VTW Organ Sound is the first in the Orchestra Tone List. The upper line of the screen shows the sound name, and the lower line shows the orchestra sound number. **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ For expansion sounds, the memory area is indicated by an A-D at the far left of the bottom line in the screen.
	 ➡ **"Tone & Drum Kit List"**

Parameter	Explanation/Value
(VTW Preset)	**(Only for VTW Organ Tone)** Select the Organ preset that you wish to assign to the selected register. **"Usr"**: This setting is the most recent of the stored VTW organ tone. **"1"**–**"32"**: 32 Organ preset (Not editable) **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ • **"USR"** is selected in the VTW organ tone at the time of start-up.
	 Usr, 1–32
LowestNt (Lowest Note)	The note you select will be the lowest note the chords you play. ➡ **"About Lowest Note"** (p. 59). **MEMO** The FR-4x's display indicates a sharp symbol **"#"** as **"♯"** If this is set to the **"GTR1 (Gtr Table1),"** **"GTR2 (Gtr Table2),"** or **"GTR3 (Gtr Table3)"** value, the FR-4x's guitar mode turns on. The numbers (1–3) represent different chord voicings (tablatures). ➡ **"Guitar Mode for the Orchestral Chord Section"** (p. 32) **MEMO** The guitar mode can also be interesting for other sounds than guitar. Feel free to experiment.
	 C, C#, D, Eb, E, F, F#, G, Ab, A, Bb, B, GTR1, GTR2, GTR3
Octave (Octave)	This parameter allows you to transpose the Orchestra Chord section (i.e. the selected orchestral or organ sound) up or down. Use it if the part you want to play with the bass buttons is too low or too high for what you have in mind.
	 –3–0–+3
Volume (Volume)	This parameter allows you to set the level of the Orchestra Chord part.
	 Off, –40–STD–40

Parameter	Explanation/Value
Panpot (Panpot)	**(Not for VTW Organ Tone)** Depending on the selected sound, this parameter allows you to change the Orchestra Chord part's placement in the stereo sound field (i.e. between the left and right speakers) to create a livelier sound image. The **"TR"** values mean that the sound will appear on the same side as the Right Hand (treble) accordion sound. This setting applies to both the FR-4x's internal speakers and the L/ MONO jack. The **"BS"** values mean that the sound will appear on the same side as the bass accordion sound (which is not available while an Orchestra Chord sound is being used). This setting applies to both the FR-4x's internal speakers and the R/ MONO jack. Choose **"0"** if the Orchestra Chord sound should be at the center of the stereo image.  BS63–0–TR63

Parameter	Explanation/Value
Voicing (Voicing)	This lets you specify the inversion of the chord that is played by the orchestra chord part. **"MOD (Mode) 1–3"** You can play a root position chord (Mode 1), a 1st inversion chord (Mode 2), and a 2nd inversion chord (Mode 3).  MODE 1 MODE 2 MODE 3 * The example in the figure is a C Major chord, but the concept is the same for min, 7th, and Dim chords. **"CYC (Cycle) 1–10"** This means that each time you play the same button in the left-hand chord section, the chord plays the next mode in the repeating series shown below.  CYCLE 1 CYCLE 2 CYCLE 3 CYCLE 4 CYCLE 5 CYCLE 6 CYCLE 7 CYCLE 8 CYCLE 9 CYCLE 10 **NOTE** • When you're playing Orchestra chords, the FR-4x always transmits the root position chord form via MIDI to avoid any problems with the control of an external MIDI arranger. • If LowestNt (Lowest Note) is the **"GTR1," "GTR2,"** or **"GTR3"** value, Voicing is indicated as **"----"** and cannot be edited.  MOD1–MOD3, CYC1–CY10
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	**(Not for VTW Organ Tone)** Use these parameters to set the Reverb or Chorus send levels (how much effect should be applied to the Orchestra Chord section).  0–127  0–127

Parameter	Explanation/Value
Attack (Attack time) **Decay** (Decay time) **Release** (Release time) **Cutoff** (Cutoff) **Reso** (Resonance) **Vib Dly** (Vibrato Delay) **Vib Dept** (Vibrato Depth) **Vib Rate** (Vibrato Rate)	**(Not for VTW Organ Tone)** ➡ **"Right Hand Orchestra Part Parameters (Orchestra Edit)"** (p. 53)
ExpPedal (Expression Pedal)	Select **"Off"** If you want to use the bellows for expressive purposes. Select **"On"** if you want control the expression by foot purchasing an optional MIDI foot controller (e.g. FC-300).  Off, On
Touch (Touch)	**(Not for VTW Organ Tone)** This parameter allows you to specify the velocity sensitivity of the Left Hand section keys when they are used to play Orchestral Chord sounds. **NOTE** • Only when you select a tone that can be controlled only by the keyboard, you can set the **"Touch"** (When a tone that can not be set is selected it will be displayed as **"----"**). For details regarding these sounds refer to the**"Tone & Drum Kit List"** supplementary manual. ➡ http://www.roland.com/manuals/ • It has no effect on the VTW Organ sounds. • There are several sounds which the difference in the velocities is incomprehensible.
	 **"FIX.L (Fixed Low)"**: The velocity value will always be 50 (0x32) regardless of the strength with which you play the keyboard.
	 **"FIX.M (Fixed Med)"**: The velocity value will always be 80 (0x50) regardless of the strength with which you play the keyboard.
	 **"FIX.H (Fixed High)"**: The velocity value will always be 127 (0x7F) regardless of the strength with which you play the keyboard.
	 **"LOW (Low)"**: The velocity value will not be less than 33 (0x21) even when you play the most weak keyboard. You get a certain amount of volume even if you play lightly on the keyboard.

Parameter	Explanation/Value
Touch (Touchh)	 **"MED (Medium)"**: The velocity value will not be less than 17 (0x11) even when you play the most weak keyboard. This is the middle of the **"Low"**and the **"High."**
	 **"HIGH (High)"** : The velocity value is controlled in the range of 1 (0x01) ~ 127 (0x7F) by the strength with which you play the keyboard.This setting is the most wide range of velocity control.
	 **"F.L+B (Fixed Low+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 20 (0x14).
	 **"F.M+B (Fixed Med.+Bellows)"**: ou will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 50 (0x32).
	 **"F.M+B (Fixed Med.+Bellows)"**: ou will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 50 (0x32).
	 **"BELW (Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard.
MIDI TX (MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the orchestra chord part.

MIDI TX

These parameters specify MIDI transmission for the orchestra chord part.

These settings can be saved for each set, and you can use different MIDI settings for each register within the set.

Parameter	Explanation/Value
Note Tx (Note Tx) **Octave** (Octave)	For details, refer to **"Accordion Edit - MIDI TX"** (p. 46).

Parameter	Explanation/Value
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If you choose **"Std,"** pressing a left hand register button will transmit a PC message of the same value as the left hand register button number, a CC00 message of **"0,"** and a CC32 message of **"0."**
	 Std, Off, 0–127
	 Std, Off, 0–127
	 Std, Off, 1–128
Volume (Volume) **Panpot** (Panpot) **Reverb** (Reverb) **Chorus** (Chorus) **Velocity** (Velocity) **Express** (Expression)	For details, refer to **"Accordion Edit - MIDI TX"** (p. 46).

Left Hand Orchestra Free Bass Part Parameters (Orchestra Free Bass Edit)

The parameters in the **"OFBsEdit (Orchestra Free Bass Edit)"** group are for the orchestra sound and VTW organ sound of the left hand orchestra free bass part.

The parameters can be saved to the selected Set.

➡ **"Playing Orchestral Sounds"** (p. 25)
➡ **"Selecting Parameters"** (p. 44)

NOTE

Orchestra Free Bass Edit parameters can be selected only if free bass mode is on (**[F.BASS]** button is lit or blinking) and the orchestra free bass part is on (**[ORCH BASS]** button is lit).

Introduction to Orchestra Free Bass Parameters

These settings are for the sound of the register that is selected for the orchestra free bass part.

Before you select a parameter and begin editing it, press the LEFT HAND part's **[ORCH CHORD/F.BASS]** button to turn on the orchestra free bass part, and press a left hand register button **[1]**–**[7]** to select the sound that you want to edit.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
(Tone)	This parameter allows you to assign the desired orchestral and VTW Organ sound to the selected register. The VTW Organ Sound is the first in the Orchestra Tone List. The upper line of the screen shows the sound name, and the lower line shows the orchestra sound number. **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ For expansion sounds, the memory area is indicated by an A-D at the far left of the bottom line in the screen. The remaining three digits indicate the sound number.
	 ➡ **"Tone & Drum Kit List"**

Parameter	Explanation/Value
(VTW Preset)	**(Only for VTW Organ Tone)** Select the Organ preset that you wish to assign to the selected register. • **"Usr"**: This setting is the most recent of the stored VTW organ tone. • **"1"–"32"** 32 Organ preset (Not editable) **MEMO** • For details regarding this settings refer to the **"Tone & Drum Kit List"** supplementary manual. Download it from the Web: http://www.roland.com/manuals/ • **"USR"** is selected in the VTW organ tone at the time of start-up.  Usr, 1–32
Octave (Octave)	This parameter allows you to transpose the Orchestra Free Bass section (i.e. the selected orchestral or organ sound) up or down. Use it if the part you want to play with the bass buttons is too low or too high for what you have in mind.  –3–0–+3
Volume (Volume)	This parameter allows you to set the level of the Orchestra Free Bass part.  Off, –40–Std–40
Panpot (Panpot)	**(Not for VTW Organ Tone)** Depending on the selected sound, this parameter allows you to change the Orchestra Free Bass part's placement in the stereo sound field (i.e. between the left and right speakers) to create a livelier sound image. Choose **"0"** if the Orchestra Free Bass sound should be at the center of the stereo image. The **"TR"** (Treble) values mean that the sound will appear on the same side as the Right Hand (treble) accordion sound. This setting applies to both the FR-4x's internal speakers and the L/MONO jack. The **"BS"** (Bass) values mean that the sound will appear on the same side as the bass accordion sound (which is not available while an Orchestra Free Bass sound is being used). This setting applies to both the FR-4x internal speakers and the R/MONO jack.  BS63–0–TR63
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	**(Not for VTW Organ Tone)** Use these parameters to set the Reverb or Chorus, and send levels (how much effect should be applied to the Orchestra Free Bass section).  0–127  0–127

Parameter	Explanation/Value
Attack (Attack time) **Decay** (Decay time) **Release** (Release time) **Cutoff** (Cutoff) **Reso** (Resonance) **Vib Dly** (Vibrato Delay) **Vib Dept** (Vibrato Depth) **Vib Rate** (Vibrato Rate)	**(Not for VTW Organ Tone)** ➡ **"Right Hand Orchestra Part Parameters (Orchestra Edit)"** (p. 53)
ExpPedal (Expression Pedal)	Select **"Off"** If you want to use the bellows for expressive purposes. Select **"On"** if you want control the expression by foot purchasing an optional MIDI foot controller (e.g. FC-300).  Off, On
Touch (Touch)	**(Not for VTW Organ Tone)** This parameter allows you to specify the velocity sensitivity of the Left Hand section keys when they are used to play Orchestral Free Bass sounds. **NOTE** • Only when you select a tone that can be controlled only by the keyboard, you can set the **"Touch"** (When a tone that can not be set is selected it will be displayed as **"----"**). For details regarding these sounds refer to the **"Tone & Drum Kit List"** supplementary manual. ➡ http://www.roland.com/manuals/ • It has no effect on the VTW Organ sounds. • There are several sounds which the difference in the velocities is incomprehensible.  **"FIX.L (Fixed Low)"**: The velocity value will always be 50 (0x32) regardless of the strength with which you play the keyboard.  **"FIX.M (Fixed Med)"**: The velocity value will always be 80 (0x50) regardless of the strength with which you play the keyboard.  **"FIX.H (Fixed High)"**: The velocity value will always be 127 (0x7F) regardless of the strength with which you play the keyboard.  **"LOW (Low)"**: The velocity value will not be less than 33 (0x21) even when you play the most weak keyboard. You get a certain amount of volume even if you play lightly on the keyboard.

Parameter	Explanation/Value	
Touch (Touch)		**"MED (Medium)"**: The velocity value will not be less than 17 (0x11) even when you play the most weak keyboard. This is the middle of the **"Low"** and the **"High."**
		**"HIGH (High)"**: The velocity value is controlled in the range of 1 (0x01) ~ 127 (0x7F) by the strength with which you play the keyboard. This setting is the most wide range of velocity control.
		**"F.L+B (Fixed Low+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 20 (0x14).
		**"F.M+B (Fixed Med.+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 50 (0x32).
		**"F.H+B (Fixed High+Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard. However, the velocity value will not be less than 80 (0x50).
		**"BELW (Bellows)"**: You will control the velocity in the movement of the bellows at the timing you play the keyboard.
Poly (Polyphonic)	**(Not for VTW Organ Tone)** For details, refer to **"Orchestra Edit - Poly/Mono"** (p. 55)/**"Orchestra Edit - Portament Time"** (p. 55).	
PortTime (Portamento Time)		
MIDI TX (MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the orchestra free bass part.	

MIDI TX

These parameters specify MIDI transmission for the orchestra free bass part.

These settings can be saved for each set, and you can use different MIDI settings for each register within the set.

Parameter	Explanation/Value
Note Tx (Note Tx)	For details, refer to Accordion Edit - MIDI TX (p. 46).
Octave (Octave)	

Parameter	Explanation/Value	
CC 00 (Control Change 00) **CC 32** (Control Change 32) **PC** (Program Change)	These parameters specify the program change (PC) and bank select (CC00, CC32) values. You can use these three values to recall sounds and memories. If you choose **"Off,"** the message is not transmitted. If you choose **"Std,"** pressing a left hand register button will transmit a PC message of the same value as the left hand register button number, a CC00 message of **"0,"** and a CC32 message of **"0."**	
		Std, Off, 0–127
		Std, Off, 0–127
		Std, Off, 1–128
Volume (Volume)	For details, refer to Accordion Edit - MIDI TX (p. 46).	
Panpot (Panpot)		
Reverb (Reverb)		
Chorus (Chorus)		
Velocity (Velocity)		
Express (Expression)		

Drum Sound Parameters (Drum Edit)

These parameters are for the drum sound played by the left hand part.

The parameters can be saved to the selected Set.

➡ **"Playing Drum Sounds"** (p. 27)

➡ **"Selecting Parameters"** (p. 44)

NOTE

Drum sounds cannot be used in free bass mode or in bass to treble mode.

Introduction to Drum Parameters

The changes you make here apply to the drum part.

A set contains only one set of drum parameters.

If you want to quickly switch just the drum settings, it is best to use a user program.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
(Drum Set)	Select the Drum Set. For details regarding the single instrument of each Drum Set refer to the **"Tone & Drum Kit List"** supplementary manual. ➡ http:/ www.roland.com/manuals
	 Pop+Perc, Pop+Vo, Old FR-7x
Level (Level)	It allows you to create the desired volume balance for the Drum section. This is a relative parameter: its value is added to or subtracted from the standard value (**"Std"**).
	 Off, –40–Std–40
Panpot (Panpot)	This parameter allows you to change the Drum part's placement in the stereo sound field (i.e. between the left and right speakers) to create a livelier sound image. Choose **"0"** if the Drum sound should be at the center of the stereo image. The **"TR"** (Treble) values mean that the sound will appear on the same side as the Right Hand (treble) sound. This setting applies to both the FR-4x's internal speakers and the L/MONO jack. The **"BS"** (Bass) values mean that the sound will appear on the same side as the bass accordion sound. This setting applies to both the FR-4x internal speakers and the R/MONO jack.
	 BS63–0–TR63

Parameter	Explanation/Value
Bass Lk1 (Bass Link1) **Bass Lk2** (Bass Link2) **Bass Lk3** (Bass Link3)	Press the **[ENTER/YES]** button, and make settings for the drum sound played by the bass part of the left hand buttons and its volume. You can simultaneously layer up to three types of drum sounds as specified by Link 1–3.
Chord Lk1 (Chord Link1) **Chord Lk2** (Chord Link2) **Chord Lk3** (Chord Link3)	Press the **[ENTER/YES]** button, and make settings for the drum sound played by the chord part of the left hand buttons and its volume. You can simultaneously layer up to three types of drum sounds as specified by Link 1–3.
Rev Send (Reverb Send) **Cho Send** (Chorus Send)	Use these parameters to set the Reverb or Chorus send levels (how much effect should be applied to the Drum section).
	 0–127
	 0–127
Touch (Touch)	This parameter allows you to specify the velocity sensitivity of the Drum section for Left hand.
	 **"Real"**: means that the drum sound is controlled by how hard or softly you press the button.
	 **"FIX.L (Fixed Low)"**: The volume value is always fixed at 50 (0x32), regardless of how strongly you play the keyboard.
	 **"FIX.M (Fixed Med)"**: The volume value is always fixed at 90 (0x5A), regardless of how strongly you play the keyboard.
	 **"FIX.H (Fixed High)"**: The volume value is always fixed at127 (0x7F), regardless of how strongly you play the keyboard.
Bellows (Bellows)	 **"Off"**: The velocity of the drum part does not change even if you move the bellows. The velocity of the drum part notes will change according to the **"Touch"** parameter.
	 **"BELW (Bellows)"**: The velocity is according to the **"Touch"** parameter, but bellows movement controls the volume.

Parameter	Explanation/Value
Bellows (Bellows)	 **"F.L+B (Fixed Low+Bellows)"**: The velocity is controlled by bellows movement at the moment you play a key. However, the velocity value will not be lower than 20 (0x14).
	 **"F.M+B (Fixed Med.+Bellows)"**: The velocity is controlled by bellows movement at the moment you play a key. However, the velocity value will not be lower than 50 (0x32).
	 **"F.H+B (Fixed High+Bellows)"**: The velocity is controlled by bellows movement at the moment you play a key. However, the velocity value will not be lower than 80 (0x50).
MIDI TX (MIDI Tx)	Pressing the **[ENTER/YES]** button lets you make MIDI TX settings for the drum part.

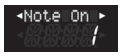
Bass Link1–3

This specifies the drum sound that is played by the bass rows of the left hand button keyboard, and specifies its volume.

You can specify up to three types of drum sound for the bass rows of the left hand button keyboard, and play up to three types of drum sound simultaneously.

Different drum sounds can be specified independently for the bass rows and the chord rows of the left hand button keyboard.

For example, you can assign a bass drum to sound for the bass rows and a snare drum to sound for the chord rows.

Parameter	Explanation/Value
Note On (Note On)	Selects the sound (instrument) that is heard when you play the bass rows of the left hand button keyboard. At this time you can play the left hand button keyboard to audition the sound. If you choose **"Off,"** the drum sound is not heard when you play the bass rows of the left hand button keyboard. For details regarding the single instrument of each Drum Set refer to the **"Tone & Drum Kit List"** supplementary manual. ➡ http:/ www.roland.com/manuals **NOTE** Depending on the drum set, some numbers have no sound assigned to them. If you select one of these numbers, there will be no sound.
	 Off, 1–128: (instrument name)

Parameter	Explanation/Value
NtOn Vol (Note On Volume)	It allows you to create the desired volume balance for the drum instrument selected. This is a relative parameter: its value is added to or subtracted from the standard value (**"Std"**).
	 –100–Std–+100
Note Off (Note Off)	Selects the sound (instrument) that is heard when you release the bass row of the left hand button keyboard. At this time you can play the left hand button keyboard to audition the sound. If you choose **"Off,"** the drum sound is not heard when you play the bass rows of the left hand button keyboard. For details regarding the single instrument of each Drum Set refer to the **"Tone & Drum Kit List"** supplementary manual. ➡ http:/ www.roland.com/manuals **NOTE** Depending on the drum set, some numbers have no sound assigned to them. If you select one of these numbers, there will be no sound.
	 Off, 1–128: (instrument name)
NtOffVol (Note Off Volume)	It allows you to create the desired volume balance for the drum instrument selected. This is a relative parameter: its value is added to or subtracted from the standard value (**"Std"**).
	 –100–Std–+100

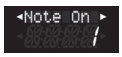
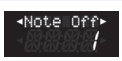
Chord Link1–3

This specifies the drum sound that is played by the chord rows of the left hand button keyboard, and specifies its volume.

You can specify up to three types of drum sound for the chord rows of the left hand button keyboard, and play up to three types of drum sound simultaneously.

Different drum sounds can be specified independently for the bass rows and the chord rows of the left hand button keyboard.

For example, you can assign a bass drum to sound for the bass rows and a snare drum to sound for the chord rows.

Parameter	Explanation/Value
Note On (Note On)	Selects the sound (instrument) that is heard when you play the chord rows of the left hand button keyboard. At this time you can play the left hand button keyboard to audition the sound. If you choose **"Off,"** the drum sound is not heard when you play the chord rows of the left hand button keyboard. For details regarding the single instrument of each Drum Set refer to the **"Tone & Drum Kit List"** supplementary manual. ➡ http:/ www.roland.com/manuals **NOTE** Depending on the drum set, some numbers have no sound assigned to them. If you select one of these numbers, there will be no sound.
	 Off, 1–128: (instrument name)
NtOn Vol (Note On Volume)	It allows you to create the desired volume balance for the drum instrument selected. This is a relative parameter: its value is added to or subtracted from the standard value (**"Std"**).
	 –100–Std–+100
Note Off (Note Off)	Selects the sound (instrument) that is heard when you release the chord row of the left hand button keyboard. At this time you can play the left hand button keyboard to audition the sound. If you choose **"Off,"** the drum sound is not heard when you play the chord rows of the left hand button keyboard. For details regarding the single instrument of each Drum Set refer to the **"Tone & Drum Kit List"** supplementary manual. ➡ http:/ www.roland.com/manuals **NOTE** Depending on the drum set, some numbers have no sound assigned to them. If you select one of these numbers, there will be no sound.
	 Off, 1–128: (instrument name)
NtOffVol (Note Off Volume)	It allows you to create the desired volume balance for the drum instrument selected. This is a relative parameter: its value is added to or subtracted from the standard value (**"Std"**).
	 –100–Std–+100

MIDI TX

These are parameters for MIDI transmission.

Parameter	Explanation/Value
Bass (Bass)	Set this parameter to **"On"** if you want that the note played in the BASS row board are transmitted by FR-4x MIDI OUT jack. With the **"Off"** setting, note messages are not transmitted.
	 Off, On
Chord (Chord)	Set this parameter to **"On"** if you want that the note played in the CHORD row board are transmitted by FR-4x MIDI OUT jack. With the **"Off"** setting, note messages are not transmitted.
	 Off, On

Keyboard Mode Parameters for the Right Hand Keyboard (Right Hand Mode)

These are the keyboard mode settings for the right hand keyboard.

The parameters can be saved to the selected Set.

➡ **"Right Hand Keyboard Mode"** (p. 27)

➡ **"Selecting Parameters"** (p. 44)

Introduction to Right Hand Mode Parameters

All changes you make here apply to the Right Hand.

IMPORTANT NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value	
Type (Type)		**"Zone"**: If you select this mode you can choose for each section a range of note. At default all section play in the whole range of the keyboard. To set the range for each section see **"Assigning a Portion of Right Hand Keyboard to Each Section"** (p. 27).
		
		"High": Use this mode if you need to play chords and a solo line using different sounds. Refer to **"Playing Chords and a Solo Line Using Different Sections (High and Low)"** (p. 27).
		
		"Low": This is the opposite of **"High"** mode: This can be used in situations where the melody (or counter-melody) lies above the notes you wish to hold. Refer to **"Playing Chords and a Solo Line Using Different Sections (High and Low)"** (p. 27).
		
A Lw Key (Accordion Low Key) **A Hi Key** (Accordion High Key)	Set the keyboard range of ACCORDION section.	
		B2–A7
		B2–A7

Parameter	Explanation/Value	
O Lw Key (Orchestra/Organ Low Key) **O Hi Key** (Orchestra/Organ High Key)	Set the keyboard range of ORCHESTRA section/ORGAN section.	
		B2–A7
		B2–A7

Parameters Common to the Set (Set Common)

The SET COMMON group contains parameters that apply to all sections, but only within the framework of the currently selected Set, most notably the parameters that specify the sound/character of the Reverb and Chorus effects.

These settings are saved in the selected set.

See **"Selecting Parameters"** (p. 44) for how to select and adjust the parameters.

Introduction to Set Common Parameters

The settings for these effects (reverb, chorus) apply to the sound of all parts in the set.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation
Reverb (Reverb)	Press the **[ENTER/YES]** button, and then edit the reverb settings that are common to the set.
Chorus (Chorus)	Press the **[ENTER/YES]** button, and then edit the chorus settings that are common to the set.
Name (SET Name)	Press the **[ENTER/YES]** button, and then edit the name of the selected set (up to eight characters).

Reverb

Parameter	Explanation/Value
Macro (Macro)	This is an easy way to select effective settings using the reverb parameters. It is convenient to choose the basic reverb settings here, and then use the following parameters to make fine adjustments.
	 **"Room 1," "Room 2," "Room 3"**: These types simulate the reverberation of a room. They provide a well-defined spacious reverberation.
	 **"Hall 1," "Hall 2"**: These types simulate the reverberation of a concert hall with a deeper reverberation than the Room reverbs.
	 **"Plate"**: This effect type simulates a plate reverb (a studio device using a metal plate to simulate natural reverb).

Parameter	Explanation/Value
Macro (Macro)	 **"Delay"**: This is a conventional delay that produces echo effects.
	 **"Panning Dly"**: This is a special delay in which the delayed sounds move left and right. It is effective when you are listening in stereo.
Level (Level)	Set the **"Level"** parameter of Reverb processor's output volume. The overall reverb volume depends on three things: the Send level of the various sections, the output level of the Reverb processor and the setting of the **[REVERB]** knob.
	 0–127
Charactr (Character)	This parameter specifies the reverb type you need. It does not load preset values for the Pre-LPF–RevPreDlyTm parameters.
	 0–7
Pre-LPF (Pre-LPF)	A low-pass filter can be applied to the high-frequency range before the signals coming from the various sections are processed by the reverb. Higher values make the Send signals darker, which results in a mellower reverberation. This parameter only applies to the signals that are sent to the Reverb processor. It does not alter the sound of the active sections.
	 0–7
Time (Time)	This parameter sets the duration of the reverb effect. Higher values result in longer reverberation.
	 0–127
DlyFback (Delay Feedback)	This parameter is only available when you set **"Character"** to **"6"** or **"7."** Feedback returns the delayed signal back to the input of the delay; this parameter adjusts the amount that is returned to the input. It specifies the number of echoes: higher values result in more repetitions.
	 0–127
Pre-DlyT (Pre-Delay Time)	This parameter sets the time interval between the original (**"dry"**) signal and the onset of the selected reverb effect. Higher values result in a longer pre-delay time, simulating a larger reverberant space.
	 0–127

Chorus

Parameter	Explanation/Value
Macro (Macro)	This is an easy way to select effective settings using the chorus parameters. It is convenient to choose the basic chorus settings here, and then use the following parameters to make fine adjustments.
	 **"Chorus 1," "Chorus 2," "Chorus 3," "Chorus 4"**: These are conventional chorus effects that add spaciousness and depth to the sound.
	 **"FBack Chr"**: This is a chorus with a Flanger-like effect and a soft sound.
	 **"Flanger"**: This is an effect that sounds somewhat like a jet airplane taking off or landing.
	 **"Short Delay"**: This is a delay with a short delay time.
	 **"ShortDly FB"**: This is a short delay with many repeats.
Level (Level)	Set the **"Level"** parameter of Chorus processor's output volume. The overall chorus volume depends on three things: the Send level of the various sections, the output level of the Chorus processor and the setting of the **[CHORUS]** knob.
	 0–127
Pre-LPF (Pre-LPF)	A low-pass filter can be applied to the high-frequency range before the signals coming from the various sections are processed by the chorus. Higher values make the Send signals darker, resulting in a mellower chorus sound. This parameter only applies to the signals that are sent to the Chorus processor. It does not alter the sound of the active sections.
	 0–7
Feedback (Feedback)	This parameter sets the level at which the Chorus sound is re-input (fed back) into the Chorus. By using Feedback, a denser chorus sound can be created. Higher values result in a greater feedback level.
	 0–127

Parameter	Explanation/Value
Delay (Delay)	This parameter sets the delay of the chorus effect. Higher values will cause greater deviation in pitch of the chorus sound.
	 0–127
Rate (Rate)	This parameter sets the speed (frequency) at which the chorus sound is modulated. Higher values result in faster modulation.
	 0–127
Depth (Depth)	This parameter sets the depth at which the chorus sound is modulated. Higher values result in a more pronounced modulation.
	 0–127
Chr->Rev (Chorus->Reverb)	This parameter sets the amount of chorus sound that is sent to the Reverb processor. The value **"127"** effectively allows you to connect the chorus and reverb effects in series (chorus before reverb). If you do not want the chorus signal to be processed by the reverb effect, set this value to **"0."**
	 0–127

System Settings (System)

Here you can make system settings for the FR-4x.

These settings apply to all sets and all parts; they apply to the entire FR-4x.

The parameters can be saved to the System area.

See **"Selecting Parameters"** (p. 44) for how to select and adjust the parameters.

Introduction to System Parameters

The settings you perform here apply to all Set and all sections.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
Tuning (Tuning)	Specifies the tuning of the FR-4x. ➡ **"Tuning-Related Parameters (Tuning)"** (p. 75)
Bel Curv (Bellow Curve Type)	Specifies the bellows curve. (Default: Std) **MEMO** Setting of the bellows curve will be automatically saved when you turn off the power.
	 **"Fixed Low,"** **"Fixed Med,"** **"Fixed High"**: There are three **"Fixed"** curves that always use the same value, no matter how hard or lightly you push/pull the bellows (no dynamic control). **"Low"** means that a low value is used, **"Med"** represents a medium value and **"High"** a high value. When you select one of these three options, you do not need to move the bellows in order to hear the notes you play.
	 **"X-Light"**: requires even less strength (the **"X"** stands for **"extra"**).
	 **"Light"**: means that you do not need to push/pull hard to achieve a meaningful effect. This setting makes it easier to play when the bellows resistance regulator is set to a light setting.

Parameter	Explanation/Value
Bel Curv (Bellow Curve Type)	**"Standard"**: refers to a normal response.  This setting makes it easier to play when the bellows resistance regulator is set to a standard setting.
	"Heavy": provides a greater variety of nuances.  This setting makes it easier to play when the bellows resistance regulator is set to a heavy setting.
	 **"X-Heavy"**: is even more detailed.
	In addition to these, the following settings are also available as choices.
	 **"CLSD (Closed)"**: This setting makes it easy to control the sound by moving the bellows in a narrow range when the bellows resistance regulator is set to a heavy setting.
	 **"OPEN (Opened)"**: This setting makes it easy to control the sound by moving the bellows in a wide range when the bellows resistance regulator is set to a light setting.
	 **"TANG (Tango)"**: This setting is suitable for tango and Latin styles when the bellows resistance regulator is set to a heavy setting.
	 **"TRAD (Traditional)"**: This setting is suitable for playing musette styles or other traditional regional styles when the bellows resistance regulator is set to a light setting.
	 **"JAZZ"**: This setting is suitable for styles such as jazz or swing when the bellows resistance regulator is set to a heavy setting.
	 **"CLAS (Classic)"**: This setting is suitable for playing classical music when the bellows resistance regulator is set to a light setting.

Parameter	Explanation/Value
Bel Curv (Bellow Curve Type)	 **"DYN1 (Dynamic1)"**: This setting makes it easier to control the sound by strongly pushing or pulling the bellows, and heightens the response of the attack when the bellows is being pushed or pulled gently. This setting is easy to play when the bellows resistance regulator is set to a medium setting.
	 **"DYN2 (Dynamic2)"**: This setting makes it easier to control the sound by strongly pushing or pulling the bellows. This setting is easy to play when the bellows resistance regulator is set to a medium setting.
Min Bel (Minimum Bellows)	This **"MIN BEL"** parameter allows you to choose a minimum threshold for the bellows curve types. **"Off"**: No Effect **"1–50"**: Amount of sensitivity This parameter has no effect with the **"Fixed Low," "Fixed Med,"** or **"Fixed High"** bellows curves.
	 Off, 1–50
B&C Mode (Bass & Chord Mode Layout)	This parameter allows you to choose the note system used in Free Bass mode. ➡ **"BASS & CHORD TABLE"** (p. 100) **NOTE** • This shift does not apply to Free Bass mode, which is an altogether different mode. • The FR-4x is supplied with several reference caps designed to help you locate the bass buttons without looking at them. ➡ **"How to Remove and Insert Reference Caps"** (p. 14) **MEMO** • This parameter is remembered even when the power is turned off. • This parameter is not initialized by a factory reset.
	 **"2 Bs Rows"**: Two rows of bass buttons, and four rows of chord buttons.
	If you choose **"3 Bs Rows,"** the bass rows increase by 20 buttons (one row), and diminished chord rows will not be available.
	 **"3 Bs Rows A-7th"**: The sixth chord row will be seventh chords (7) without the 5th. For example in the case of a C7 chord, the notes C-E-Bb (no G) will sound.

Parameter	Explanation/Value
B&C Mode (Bass & Chord Mode Layout)	 **"3 Bs Rows A-5 dim"**: The sixth chord row will be seventh chords without the root note. For example in the case of a C7 chord, the notes E-G-Bb (no C) will sound.
	 **"3 Bs Rows B-7th"**: The **"3 Bs Rows A-7th"** and bass row layout are different.
	 **"3 Bs Rows B-5 dim"**: The **"3 Bs Rows A-5 dim"** and bass row layout are different.
	 **"3 Bs Rows Bx-7th"**: The **"3 Bs Rows B-7th"** layout is reversed left to right. The position of the C3 note changes (9th from left to 12th from left).
	 **"3 Bs Rows Belgium"**: Simulates the Belgian layout.
FBs Mode (Free Bass Mode Layout)	This parameter allows you to choose the note system used in Free Bass mode. Your FR-4x contains the 5 most popular ones. ➡ **"FREE BASS MODE TABLE"** (p. 101) **NOTE** • This layout does not apply to bass & chord mode. • The FR-4x is supplied with several reference caps designed to help you locate the bass buttons without looking at them. ➡ **"How to Remove and Insert Reference Caps"** (p. 14) **MEMO** • This parameter is stored even when the power is turned off. • This parameter is not initialized even if the factory reset all.
	 Minor 3rd
	 Bajan
	 Fifth
	 North Europe
	 Finnish

Parameter	Explanation/Value
TrblMode (Treble Mode Layout) * Only for button type	Like for the accordion instrument itself, there are different varieties of chromatic instruments, with different Right Hand button layouts. Since your FR-4x is an electronic musical instrument, changing the note assignments to the button keys is a matter of selecting the preset that best suits your playing style. ➡ **"TREBLE MODE TABLE"** (p. 102) Pay attention to the note names (all Cs appear on a gray background) and look at how they are arranged, then make your selection. You may have noticed that the Right Hand buttons are colored white (for notes without alteration) and black (notes with alteration, i.e. #/b). This coloring doesn't change when you select another system. You can, however, replace the buttons and install them in the right places so as to make the white and black buttons correspond to the notes being played. ➡ **"How to Replace a Right Hand Button of Your FR-4xb Keyboard"** (p. 14) **MEMO** • This parameter is stored even when the power is turned off. • This parameter is not initialized even if the factory reset all.
	 C-Griff Europe
	 C-Griff 2
	 B-Griff Bajan
	 C-Griff Fin
	 DGriff 1
	 D Griff 2
OutputLv (Output Level)	This parameter is only meaningful when the FR-4x is connected to an amplifier, a HiFi mixing console or a commercially available wireless system. If the FR-4x output signal distorts even if the **[VOLUME]** knob is set to the minimum value (or close to it), try **"–6 dB."** If that is still **"too hot,"** set this parameter to **"–12 dB."** **NOTE** This parameter has no effect on the FR-4x internal speakers.
	 –12, –6, 0 **[dB]** (Default: 0 dB)

Parameter	Explanation/Value
StereoWd (Stereo Width)	Much care has been taken to provide a natural stereo image for the accordion sounds. If you think the stereo image is too wide for comfort (or if you prefer to set the PAN controls on your mixing console differently), you can use this parameter to reduce the stereo image. **"–63"** corresponds to an extremely narrow stereo image. **"Natural"** means that the original stereo image is used, while **"Wide"** represents the widest stereo image.
	 -63–Natural, Wide (Default: -15)
Speakers (Speakers)	**"Off"**: When you use the FR-4x for live performances and therefore connect it to an external amplification system, it may be convenient to switch off the FR-4x internal speakers, because doing so preserves battery power. **"On"** : Choose this option if you want to use the FR-4x internal speakers. **NOTE** Connecting a pair of headphones mutes the internal speakers. **"On+Phones"**: Choose this option if you want to use the FR-4x internal speakers also while a pair of headphones is connected.
	 Off, On, On+Phones (Default: On)
Auto Off (Auto Off)	This parameter allows you to cause the FR-4x to switch itself off after the selected number of minutes has elapsed if you are not using it. Select **"Off"** if you prefer not to use this function. For the procedure, refer to p. 44. However if you don't save the system settings, this setting is lost when you power-off the FR-4x. For details on how to save the system settings, refer to p. 86.
	 Off, 10, 30, 240 **[min]** (Default: 240 min)
A. FileLv (Audio File Level)	If the playback of audio file seems too loud or too soft, you may want to change the audio level.
	 0–127 (Default: 100)

Parameter	Explanation/Value
Rec Att (Rec Attenuation)	This specifies the audio attenuation level when recording audio data. (Default: Off)  Off  Medium  High
Func Sw (Function Switch)	Press the **[ENTER/YES]** button to make settings for the function switches. ➡ **"Function Switch"** (p. 76)
SustainA (Sustain A Routing)	Press the **[ENTER/YES]** button to make settings for the Sustain A routing. ➡ **"Sustain A Routing"** (p. 79)
SustainB (Sustain B Routing)	Press the **[ENTER/YES]** button to make settings for the Sustain B routing. ➡ **"Sustain B Routing"** (p. 79)
FootCtrl (MIDI Foot Controller)	Press the **[ENTER/YES]** button to make settings for the MIDI Foot Controller. ➡ **"MIDI Foot Controller"** (p. 80)
SpEQ R.H (Speaker EQ Right Hand)	Press the **[ENTER/YES]** button to make settings for the Speaker EQ Right Hand. ➡ **"Speaker EQ Right Hand"** (p. 80)
SpEQ L.H (Speaker EQ Left Hand)	Press the **[ENTER/YES]** button to make settings for the Speaker EQ Left Hand. ➡ **"Speaker EQ Left Hand"** (p. 81)
Noise (Keyboard & Button Noise)	This parameter allows you to specify if you want or not the typical noise that Keyboard and Button board produce.  On, Off (Default: On)
A/B Sw (A/B Switch)	When pressing the right-register button is selected again, the state of the A (1-7) / B (8-14) selection is switched. For example, when the register 4 of A-side is selected, the register 11 of B-side will be selected by pressing the **[4/11]** button. **NOTE** When the organ part is selected, if you set the **"A/B Sw"** to ON, you will not be able to switch slow / fast of rotary effect.  Off, On (Default: Off)
S-Up SET (Start-Up SET)	This parameter allows you to specify which Set should be loaded at power-on.  1–100 (Default: 1)

Parameter	Explanation/Value
USB Drv (USB Driver)	**"Generic"**: Choose this if you want to use the standard USB driver that was included with your computer. **"Original"**: Choose this if you want to use a USB driver downloaded from the Roland website (www.roland.com). (Default: Original) * This setting is applied after you save the change and turn the power of the FR-4x off and on again.  Generic  Original
MIDI	Make MIDI-related settings for the FR-4x. ➡ **"MIDI"** (p. 82)

Tuning-Related Parameters (Tuning)

Here you can make settings that are related to tuning.

The master tuning setting is saved in system area, and the transpose setting is saved in the user program.

Scale tuning settings are saved in both the system area and the user program.

➡ **"How to Save System Parameters"** (p. 86)

➡ **"Saving an User Program"** (p. 39)

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
M. Tuning (Master Tuning)	This parameter allows you to change the FR-4x overall tuning.  415.3–440.0–466.2 **[Hz]**
Transpose (Transpose)	This parameter allows you to transpose all sections of the FR-4x.  -6–0–5 (F#–C–F)
S. TunTyp (Scale Tune Type)	This parameter allows you to change scale type. ➡ **"Scale (Tuning)"** (p. 31)  Equal (Off)  User 1–3  Arabic 1–2  Just Major  Just Minor  Pythagorean  Mean-Tone  Werckmeister  Kirnberger

Parameter	Explanation/Value
S. TunPat (Scale Tune Part)	The Scale Tune is assigned to the selected part.Select **"All"** to assign your settings to all parts.
	 Accordion
	 Orchestra
	 Accordion&Orchestra
	 Bass&Chord
	 Orch Bass
	 Orch Chord
	 Orch Free Bass
	 ALL
S. TunKey (Scale Tune Key)	This parameter allows you to change the fundamental of scale (root). **MEMO** The FR-4x's display indicates a sharp symbol **"#"** as **"♯"**
	 C, C#, D, Eb, E, F, F#, G, Ab, A, Bb, B
S. TunEdt (Scale Tune Edit)	When User1 ~ 3 is selected to TYPE, and press the **[ENTER/YES]** button, you can edit the user scale you choose.

Scale Tune Edit

You can tune the pitch of each note of the user scale (User 1–3) that is selected by S.TunTyp (Scale Tune Type).

This is convenient when you want to create scales such as oriental scales.

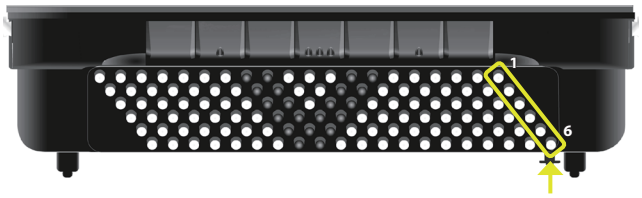
NOTE

If the scale tuning type is something other than a user scale (USR1, USR2, USR3), you can't access the Scale Tune Edit (S. TunEdt) screen.

Parameter	Explanation/Value
C–B (each note can be set individually)	Changes the pitch of the notes C–B in steps of 1 cent. The value that you specify is applied to all notes of the same name. If you change the tuning of the **"C,"** that value is added to, or subtracted from, all Cs (C1, C2, C3, etc.). (**"–50"** means that the note in question is tuned a quarter tone down.)
	 -64–0–+63

Function Switch

The parameters on this page allow you to assign the desired functions to the bass buttons that can be used as function switch. Remember that these functions are only used when the **"Status"** parameter is set to **"On."**



Function Switch

Parameter	Explanation/Value
Status (Status)	Select **"On"** if you want to use the bass button column closest to the FR-4x logo to select or control the desired functions. When this parameter is set to **"On,"** the buttons in question can no longer be used to play notes or chords.
	 Off, On
Switch 1–6 (Switch 1–6)	Assign a function to each switch. Default **Switch 1:** Register4 **Switch 2:** Sus.A **Switch 3:** Modulation **Switch 4:** PitchDown 0.5 **Switch 5:** Octave UpDown **Switch 6:** Octave DownUp
	 **"Off"**: The Function switch is not assigned.
	  **"Set Up," "Set Down"**: The Function switch allows you to select the next (Down) or previous (Up) Set memory.
	  **"User Program Up," "User Program Down"**: The Function switch allows you to select the next (Down) or previous (Up) User Program memory.
	  **"Register Up," "Register Down"**: The Function switch allows you to select the next (Down) or previous (Up) treble register.

Parameter	Explanation/Value
Switch 1–6 (Switch 1–6)	  **"Sustain A," "Sustain B"**: Transmits a hold message for the sound of the selected part via MIDI. The notes being played on the right hand keyboard or left hand keyboard will continue sustaining as long as you hold down the function switch. ➡ **"Sustain A Routing"** (p. 79) ➡ **"Sustain B Routing"** (p. 79)
	 **"Start/Stop"**: Pressing the Function Switch once will cause the external MIDI device to start playback. Press the Chin again to stop playback.
	    **"Intro 1," "Intro 2," "Intro 3," "Intro 4"**: The Function Switch can be used to select the **"Intro"** patterns of an external MIDI arranger device. **NOTE** Arranger instruments of other manufacturers may not understand this message.
	    **"Main 1," "Main 2," "Main 3," "Main 4"**: The Function Switch can be used to select the **"Main"** patterns of an external MIDI arranger device. **NOTE** Arranger instruments of other manufacturers may not understand this message.
	      **"Fill Down 1," "Fill Down 2," "Fill Down 3," "Fill Up 1," "Fill Up 2," "Fill Up 3"**: The Function Switch can be used to select the **"Fill"** patterns of an external MIDI arranger device **NOTE** Arranger instruments of other manufacturers may not understand this message.

Parameter	Explanation/Value
Switch 1–6 (Switch 1–6)	    **"Ending 1," "Ending 2," "Ending 3," "Ending 4"**: The Function Switch can be used to select the **"Ending"** patterns of an external MIDI arranger device. **NOTE** Arranger instruments of other manufacturers may not understand this message.
	 **"Intro"**: The Function Switch can be used to select the **"Intro"** pattern of an external MIDI arranger device.
	  **"Fill to Original," "Fill to Variation"**: The Function Switch can be used to select a fill-in pattern of an external MIDI arranger device. If the instrument being controlled provides several fill-in patterns, you can select them one after the other in ascending order.
	 **"Ending"**: The Function Switch can be used to select the **"Ending"** pattern of an external MIDI arranger device.
	  **"Pitch Up 0.5 (1/2)," "Pitch Up 1"**: The selected Function Switch allows you to bend the notes you are playing a semitone (**"1/2"**) or two semi-tones (**"1"**) up. When you release the Function Switch, the pitch returns to its regular level.
	  **"Pitch Down 0.5 (1/2)," "Pitch Down 1"**: The selected Function Switch allows you to bend the notes you are playing a semitone (**"1/2"**) or two semi-tones (**"1"**) down. When you release the Function Switch, the pitch returns to its regular level.

Parameter	Explanation/Value
Switch 1–6 (Switch 1–6)	 **"Rotary Switch"**: The Function Switch allows you to switch the Rotary effect on and off. **NOTE** This is valid only if a VTW organ sound is selected.
	 **"Rotary Slow/Fast"**: The Function Switch allows you to alternate between the slow and fast rotation speeds. **NOTE** This is valid only if a VTW organ sound is selected.
	 **"Rotary Slow"**: The Function Switch allows you to select the slow rotation speed. **NOTE** This is valid only if a VTW organ sound is selected.
	 **"Rotary Fast"**: The Function Switch allows you to select the fast rotation speed. **NOTE** This is valid only if a VTW organ sound is selected.
	 **"Brake On/Off"**: The Function Switch allows you to switch the VTW organ part's brake eff ect on and off. This simulates the effect you get when you switch a tone wheel organ off (**"On"**) or on (**"Off"**) while playing. **NOTE** This is valid only if a VTW organ sound is selected.
	 **"Brake On"**: When you press the Function Switch, the pitch will gradually fall. **NOTE** This is valid only if a VTW organ sound is selected.
	 **"Brake Off"**: When you press the Function Switch, the pitch will gradually rise from a lower to the regular level. **NOTE** This is valid only if a VTW organ sound is selected.

Parameter	Explanation/Value
Switch 1–6 (Switch 1–6)	 **"Modulation"**: The Function Switch allows you to add vibrato to the notes you are currently playing.
	 **"Play/Pause"**: The Function Switch can be used to start and temporarily stop playback of the selected audio file. ➡ **"Playing Back a Song from a USB Flash Drive"** (p. 37)
	 **"Skip BWD"**: When the Playback is stopped, the Function Switch allows you to return to the beginning of the currently selected audio file. Press it twice to jump to the beginning of the previous file in alphabetical order. It can also be used to select the previous step of the selected playlist. **MEMO** If the song playback position is one second or later, this returns the playback position to the beginning.
	 **"Skip FWD"**: When the Playback is stopped, the Function Switch allows you to jump to the next audio fi le in alphabetical order (**"FWD"**). It can also be used to select the next step of the selected playlist.
	 **"Rec On/Off"**: The Function Switch allows you to start and stop the FR-4x audio recorder. ➡ **"Recording"** (p. 38)
	 **"Drum On/Off"**: The Function Switch allows you to switch the DRUM section on and off.
	 **"Register1–14"**: The Function Switch can be used to recall the selected Right Hand register. That is why you must specify a number here.
	 **"Sordina Switch"**: Switches the sordina effect on/off.
	 **"Zone"**: Sets the keyboard mode to Zone.

Parameter	Explanation/Value	
Switch 1–6 (Switch 1–6)		**"High"**: Sets the keyboard mode to Zone.
		**"Low"**: Sets the keyboard mode to Low.
		**"Accordion Button"**: The same operation as the **[Accordion]** button.
		**"Organ Button"**: The same operation as the **[Organ]** button.
		**"Orchestra Button"**: The same operation as the **[Orchestra]** button.
		**"Bass & Chrd Button"**: The same operation as the **[Bass & Chrd]** button.
		**"F.Bass Button"**: The same operation as the **[F.Bass]** button.
		**"Orch Chrd/F.Bass Button"**: The same operation as the **[Orch Chrd/F.Bass]** button.
		**"Orch Bass Button"**: The same operation as the **[Orch Bass]** button.
		**"Octave Up"**: Shift the right hand current part by +1 octave.
		**"Octave Down"**: Shift the right hand current part by -1 octave.
		**"Octave UpDown"**: Shifts the right hand current part by +1 octave only while the button is operated.
		**"Octave DownUp"**: Shifts the right hand current part by -1 octave only while the button is operated.

Sustain A Routing

If a function switch or external MIDI foot controller (such as the FC-300) is assigned to the **"SUS.A"** (Sustain A routing) function, you can specify whether each part is controlled.

Parameter	Explanation/Value	
SusA Orc (Sustain A Orchestra) **SusA OBs** (Sustain A Orchestra Bass) **SusA OCh** (Sustain A Orchestra Chord) **SusA OFb** (Sustain A Orchestra FBass)	**"On"**: the relative section is controlled by the Sustain A routing function.	
		Off, On (Default: On)
		Off, On (Default: Off)
		Off, On (Default: Off)
		Off, On (Default: Off)
SusA All (Sustain A All)	**"On"**: the all section are controlled by the Sustain A routing function.	
		Off, On

Sustain B Routing

If a function switch or external MIDI foot controller (such as the FC-300) is assigned to the **"SUS.B"** (Sustain B routing) function, you can specify whether each part is controlled.

Parameter	Explanation/Value	
SusB Orc (Sustain B Orchestra) **SusB OBs** (Sustain B Orchestra Bass) **SusB OCh** (Sustain B Orchestra Chord) **SusB OFb** (Sustain B Orchestra FBass)	**"On"**: the relative section is controlled by the Sust.B (Sustain B routing) function.	
		Off, On (Default: Off)
		Off, On (Default: On)
		Off, On (Default: On)
		Off, On (Default: On)
SusB All (Sustain B All)	**"On"**: the all section are controlled by the Sust.B (Sustain B routing) function.	
		Off, On

MIDI Foot Controller

These settings assign functions to an external MIDI foot controller such as the FC-300.

Some functions can control an external device such as an arranger module.

Parameter	Explanation/Value
Switch 1–9 (Switch 1–9)	Assign a function to each switch.  The functions that can be assigned are the same as for the function switches. ➡ **"Function Switch"** (p. 76)

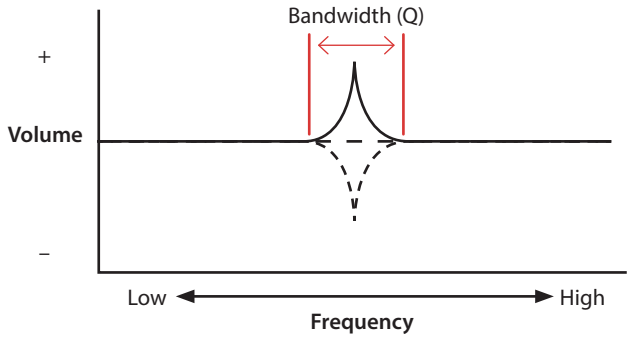
Speaker EQ Right Hand

The equalizer settings for the right hand speaker can be adjusted to your preference.

Parameter	Explanation/Value
InptGain (Input Gain)	Gain of the Input  -15–+15 (Default: 0)
Lo Freq (Low Frequency)	Specifies the center frequency of the peaking filter.  100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000 (Default: 280)
Lo Q (Low Q)	Specifies the bandwidth of the peaking filter. Higher values make the width narrower.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 3.0)
Lo Gain (Low Gain)	Adjusts the amount of boost/cut applied by the peaking filter.  -15–+15 (Default: -8)
M1 Freq (Mid 1 Frequency)	Specifies the center frequency of the peaking filter.  100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000 (Default: 450)
M1Q (Mid 1 Q)	Specifies the bandwidth of the peaking filter. Higher values make the width narrower.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 3.0)
M1 Gain (Mid 1 Gain)	Adjusts the amount of boost/cut applied by the peaking filter.  -15–+15 (Default: -6)
M2 Freq (Mid 2 Frequency)	Specifies the center frequency of the peaking filter.  100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000 (Default: 2800)
M2 Q (Mid 2 Q)	Specifies the bandwidth of the peaking filter. Higher values make the width narrower.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 4.0)
M2 Gain (Mid 2 Gain)	Adjusts the amount of boost/cut applied by the peaking filter.  -15–+15 (Default: +3)
Hi Freq (High Frequency)	Specifies the center frequency of the high shelving filter.  1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000, 4500, 5000, 5600, 6300, 7100, 8000 (Default: 2200)
Hi Q (High Q)	Adjusts the way in which change occurs for the region near the center frequency of the high shelving filter. Normally you should set this to 0.7.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 0.7)
Hi Gain (High Gain)	Adjusts the amount of boost/cut applied by the high shelving filter.  -15–+15 (Default: +6)

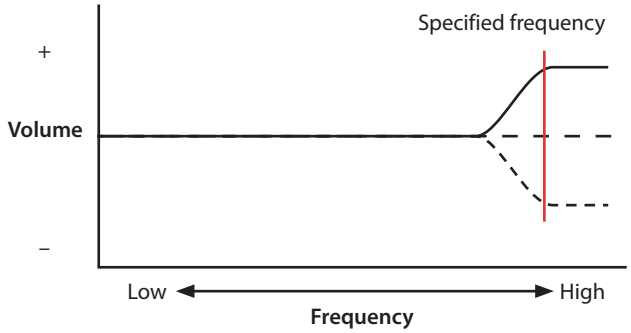
Peaking filter

Modifies the sound in the region of the specified frequency.



High shelving filter

Modifies the sound above the specified frequency.



Speaker EQ Left Hand

The equalizer settings for the left hand speaker can be adjusted to your preference.

Parameter	Explanation/Value
InptGain (Input Gain)	Gain of the Input  -15–+15 (Default: 0)
Lo Freq (Low Frequency)	Specifies the center frequency of the peaking filter.  100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000 (Default: 250)
Lo Q (Low Q)	Specifies the bandwidth of the peaking filter. Higher values make the width narrower.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 3.0)
Lo Gain (Low Gain)	Adjusts the amount of boost/cut applied by the peaking filter.  -15–+15 (Default: -4)
M1 Freq (Mid 1 Frequency)	Specifies the center frequency of the peaking filter.  100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000 (Default: 400)
M1Q (Mid 1 Q)	Specifies the bandwidth of the peaking filter. Higher values make the width narrower.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 3.0)
M1 Gain (Mid 1 Gain)	Adjusts the amount of boost/cut applied by the peaking filter.  -15–+15 (Default: -7)
M2 Freq (Mid 2 Frequency)	Specifies the center frequency of the peaking filter.  100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000 (Default: 1800)

Parameter	Explanation/Value
M2 Q (Mid 2 Q)	Specifies the bandwidth of the peaking filter. Higher values make the width narrower.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 4.0)
M2 Gain (Mid 2 Gain)	Adjusts the amount of boost/cut applied by the peaking filter.  -15–+15 (Default: -5)
Hi Freq (High Frequency)	Specifies the center frequency of the high shelving filter.  1000, 1100, 1300, 1400, 1600, 1800, 2000, 2200, 2500, 2800, 3200, 3600, 4000, 4500, 5000, 5600, 6300, 7100, 8000 (Default: 2200)
Hi Q (High Q)	Adjusts the way in which change occurs for the region near the center frequency of the high shelving filter. Normally you should set this to 0.7.  0.5, 0.7, 1.0, 1.5, 2.0, 3.0, 4.0, 6.0, 8.0 (Default: 0.7)
Hi Gain (High Gain)	Adjusts the amount of boost/cut applied by the high shelving filter.  -15–+15 (Default: +10)

MIDI

The FR-4x supports MIDI. You can connect an external MIDI device and use the FR-4x to control the external MIDI device, or control the FR-4x from a connected external MIDI device.

For details on how to connect an external MIDI device, refer to **"Connecting a MIDI Device"** (p. 11).

These settings can be saved in the system area.

Introduction to MIDI Parameters

The settings you perform here apply to all Set and all sections.

NOTE

The FR-4x internal memory (temporary area) remembers your settings while the FR-4x is switched on. While editing, there is no absolute need to save your settings. Be aware, however, that all changes are lost when the FR-4x is switched off .

See **"How to Save a Set"** (p. 33) to save your changes.

Also be sure to read **"Important Remark About Saving Your Settings"** (p. 45).

Parameter	Explanation/Value
Out/In (MIDI Out/In)	This parameter allows you to define the function of the FR-4x's MIDI OUT/IN connector. **"Out"**: Select this setting if you want to play on the FR-4x's keyboards and transmit the MIDI data generated by your playing to an external device. **"In"**: Choose this setting if you want to receive MIDI data from an external device. **NOTE** When MIDI OUT/IN is IN, if you want to receive the MIDI information from an external device, you need to set **"External Seq. Playback"** (p. 83) parameters of the each part.  Out, In (Default: Out)
Rx-Tx (Real Time Rx-Tx)	Press the **[ENTER/YES]** button to specify the MIDI channel for each part.
Ext Seq (External Seq. Playback)	Press the **[ENTER/YES]** button to specify whether the FR-4x's keyboard and the FR-4x's sound generator are connected for each part.
Global (Global Setting)	Press the **[ENTER/YES]** button to make settings for the global filter.
Exp Tx (Expression MIDI Tx)	Press the **[ENTER/YES]** button to specify whether each part transmits expression messages via MIDI.

Real Time Rx-Tx

Here you can specify the MIDI channel for each part.

Parameter	Explanation/Value
Acordion (Accordion) **Orch/Org** (Orchestra/Organ) **Bs/F.Bs** (Bass/Free Bass) **Chord** (Chord) **O. Bass** (Orchestra Bass) **O. Chord** (Orchestra Chord) **O.FBass** (Orchestra Free Bass) **Drum** (Drum)	Allows you to assign a MIDI receive and transmit channel to the selected part. Select **"Off"** if the part in question should neither receive nor transmit MIDI data.
	 1–16, Off (Default: 1)
	 1–16, Off (Default: 4)
	 1–16, Off (Default: 2)
	 1–16, Off (Default: 3)
	 1–16, Off (Default: 5)
	 1–16, Off (Default: 6)
	 1–16, Off (Default: 7)
	 1–16, Off (Default: 10)
Basic (Basic Channel)	This parameter allows you to set the basic MIDI channel. The **"Basic Channel"** can be used for selecting Sets and User Programs from an external MIDI device (using CC00/CC32 (bank select) and PC (program change numbers)). The CC00/CC32/PC which corresponds to select of SETs and User Programs is as follows. Select **"Off"** if the part in question should neither receive nor transmit MIDI data.
	 1–16, Off (Default: 13)

	CC 00	CC 32	PC
SET	0	0	0–99 (1–100: SET Number)
User Program	1	0–6 (1–7: Bank)	0–13 (1–14: User Program Number)

External Seq. Playback

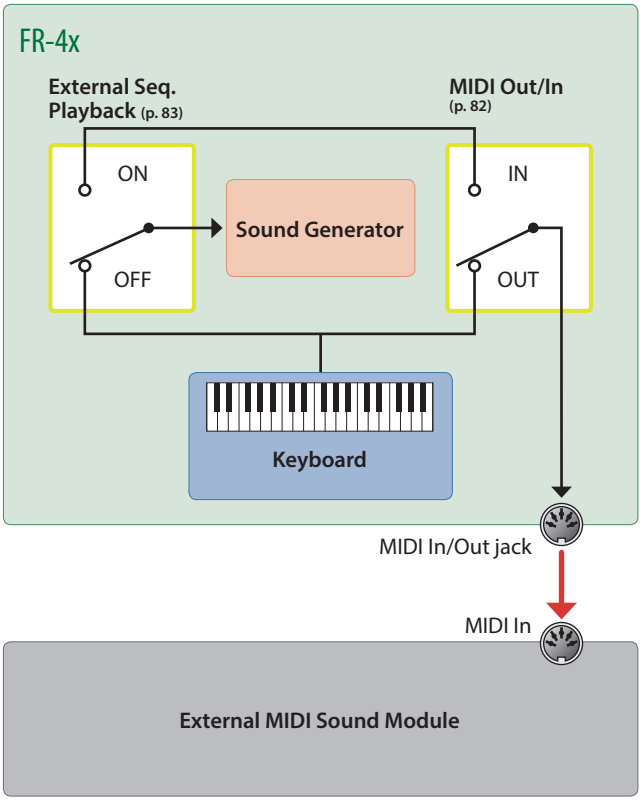
These settings let you disconnect the FR-4x's keyboard from the FR-4x's sound generator.

If you are playing the FR-4x with a sequencer or similar MIDI device connected, and the performance played back by the sequencer is overlaying the performance played on the FR-4x's own keyboard, turn this setting **"ON"** for the parts that you are not playing on the FR-4x.

Parts for which this setting is **"ON"** are played by MIDI messages from an external MIDI device.

Parameter	Explanation/Value
All Part (All parts) **Acordion** (Accordion) **Bas&Chrd** (Bass & Chord) **Orchestr** (Orchestra) **Drum** (Drum)	If this is **"On,"** the keyboard is disconnected from the FR-4x's internal sound generator. **NOTE** • **"Bass & Chord"** includes Free bass/Orch. bass/Orch. Chord/Orch. Free bass. • **"Orchestra"** includes Orchestra and Organ.
	 Off, On (Default: Off)
	 Off, On (Default: Off)
	 Off, On (Default: Off)
	 Off, On (Default: Off)
	 Off, On (Default: Off)

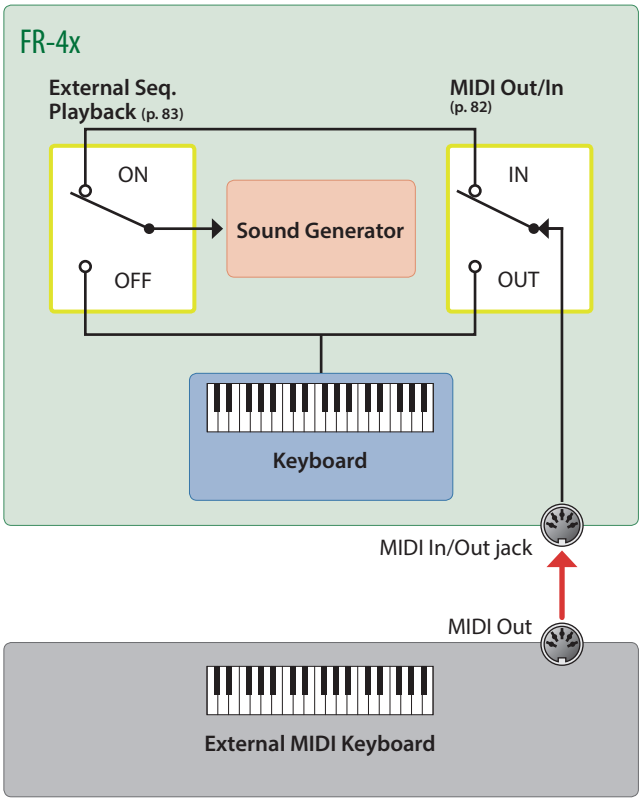
Using a connected external MIDI sound module



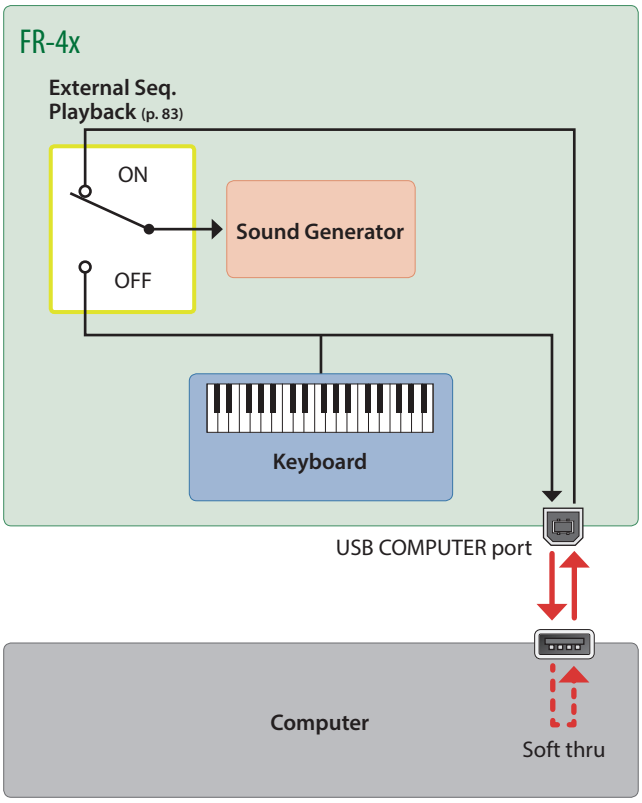
Using a connected external MIDI keyboard

NOTE

If MIDI OUT/IN is set to IN, and performance data is being received from an external device, use **"External Seq. Playback"** (**p. 83**) to specify the parts that will receive performance data.



Connecting a DAW via the USB COMPUTER port



Global Setting

This page contains Global Filters parameters that allow you to fi lter some MIDI messages each section can transmit.

Use these settings if the receiving MIDI device poses problems whenever the FR-4x transmits a given MIDI message.

NOTE

This parameter applies to the FR-4x as a whole (all Sets).

Parameter	Explanation/Value
Note Tx (Note Tx)	Select **"Off"** to filter the transmission of MIDI note messages.
	 Off, On (Default: On)
CC 00 (Control Change 00)	Select **"Off"** to filter the transmission of Control Change 00 messages.
	 Off, On (Default: On)
CC 32 (Control Change 32)	Select **"Off"** to filter the transmission of Control Change 32 messages.
	 Off, On (Default: On)
PC (Program Change)	Select **"Off"** to filter the transmission of Program Change messages.
	 Off, On (Default: On)
Volume (Volume)	Select **"Off"** to filter the transmission of Volume messages.
	 Off, On (Default: On)
Panpot (Panpot)	Select **"Off"** to filter the transmission of Panpot messages.
	 Off, On (Default: On)
Reverb (Reverb)	Select **"Off"** to filter the transmission of Reverb messages.
	 Off, On (Default: On)
Chorus (Chorus)	Select **"Off"** to filter the transmission of Chorus messages.
	 Off, On (Default: On)
Sustain (Sustain)	Select **"Off"** to filter the transmission of Sustiain messages.
	 Off, On (Default: On)

Parameter	Explanation/Value
Bellows (Bellows Tx)	This parameter allows you to specify how many data the FR-4x bellows may transmit for expression purposes. ➡ **"Express (Expression)"** (p. 48) As long as the external sequencer you work with does not display a **"MIDI buffer overflow"** message, you can leave this setting at **"High."** Depending on your sequencer, you could also select **"Super"** to achieve the most natural response. If, however, the bellows' data amount is too much for the receiving sequencer (because such data are transmitted on several channels simultaneously), select a different setting. In that case, the amount of data will be reduced. This leads to a coarser resolution, and maybe even audible steps, but at least, your sequencer will be able to record the data. If **"Normal"** still generates too many data, select **"Low."** **"TX"** means that this parameter only applies to data sent by the FR-4x. Its own MIDI buffer is big enough to receive high-resolution data. (Default: Low)
	 Super
	 High
	 Normal
	 Low
Chord (Chord Tx Mode)	 **"Normal"**: The note numbers of all chord notes are transmitted via MIDI. (Default: Normal)
	 **"D-Mode"**: Each chord button only transmits one note number according to the following system: **Major chords:** 48–59* **Minor chords:** 60–71 **7th chords:** 72–83 **Dim chords:** 84–95 * All note numbers are specified in the order C~B. Example: Note number 48 represents a C major chord, note number 49 a C# major chord, etc.

Parameter	Explanation/Value
Chord (Chord Tx Mode)	 **"Accordion"**: The FR-4x transmits only the notes of the chords it plays without adding any other note degrees.
2ndBsOut (2nd Bass Out)	This parameter allows you to define a second MIDI channel for the transmission of the bass notes you play on the FR-4x. This additional channel may come in handy for certain MIDI modules you may want to control from the FR-4x.
	 Off, On (Default: Off)
2ndBsCh (2nd Bass Channel)	The bass notes are transmitted on this MIDI channel.
	 1–16 (Default: 1)
2ndBsOct (2nd Bass Octave)	This parameter allows you to transpose the bass notes transmitted on the second MIDI channel up to three octaves up or down.
	 -3–0–+3 (Default: 0)
Strt/Stp (Start/Stop Tx)	This parameter allows you to specify whether or not pressing the **[ENTER/YES]** button while the main page is displayed sends a MIDI Start message the first time, and a MIDI Stop message the second time. This may come in handy when you use the FR-4x with a MIDI sequencer, a drum machine, or an arranger module.
	 Off, On (Default: Off)

Expression MIDI Tx

This parameter allows you to specify which section should transmit Expression messages.

➡ **"Express (Expression)"** (p. 48)

If you want all parts to transmit expression messages, choose the **"All parts"** setting.

If you want to use a different setting for each part, specify **"On"** or **"Off"** for each part.

The setting of this parameter applies only to the amount of data transmitted via MIDI from the FR-4x.

NOTE

This parameter applies to the FR-4x as a whole (all Sets).

Parameter	Explanation/Value
All part (All parts)	Select **"Off"** to deactivate the Expression MIDI transmission.
Acordion (Accordion) **Bas&Chrd** (Bass & Chord) **Orch/Org** (Orchestra/Organ) **OrchBass** (Orchestra Bass) **OrchChrd** (Orchestra Chord) **OrchFBas** (Orchestra FBass)	 Off, On (Default: On)

How to Save System Parameters

Among the parameter group of the menu screen, **"SYSTEM"** group will be saved (However, Transpose will not be saved).

1. Modify all parameters you would like to use.

2. Press and hold the [MENU/WRITE] button to jump to the "Write" page.

3. Use the [–] [+] buttons to select "System."

4. Press the [▶] button.

A confirmation message appears.

5. Press the [ENTER/YES] button.

A message briefly indicates that data is being written, and then indicates **"Complete"** when saving is completed.

If you decide to cancel, press the **[EXIT/NO]** button.

Convenient Functions (Utility)

Here you can copy, export, or import sounds, add expansion sounds, and perform a factory reset.

Display	Function
	**Copy SET** This parameter allows you to copy the settings of one Set to another Set memory. ➡ **"Copying a Set to Another Set (Copy SET)"** (p. 87)
	**Copy EFX** This parameter allows you to copy the settings of the desired effects processors from one Set to another. ➡ **"Copying Settings of a Set to Another Set (Copy EFX)"** (p. 88)
	**Copy REG** This parameter allows you to copy the settings of one register to another register. ➡ **"Copying the Contents of a Register (Copy REG)"** (p. 88)
	**AccMacro** This parameter allows you to change the settings of the Right Hand register (Treble) in the current SET. ➡ **"Simultaneously Editing the Right Hand Accordion Sounds (AccMacro)"** (p. 89)
	**BasMacro** This parameter allows you to change the settings of the Left Hand Bass & Chord register (Accordion) in the current SET. ➡ **"Simultaneously Editing the Left Hand Accordion Sounds (BasMacro)"** (p. 90)
	**FBsMacro** This parameter allows you to change the settings of the Left Hand FreeBass register in the current SET. ➡ **"Simultaneously Editing the Free Bass Sounds (FBsMacro)"** (p. 92)
	**Restore** This function allows you to undo all or some changes you made after last saving your settings by reloading the last version you saved. ➡ **"Returning Parameter Values to the Saved State (Restore)"** (p. 93)
	**Export** This function allows you to save the SET or User Program data to the connected USB flash drive. ➡ **"Saving a Set or User Program to a USB Flash Drive (Export)"** (p. 94)
	**Import** This function allows you to import the settings of a SET and User Program file from the connected USB flash drive. ➡ **"Importing a Set or User Program from a USB Flash Drive (Import)"** (p. 94)
	**Exp. Snd** The FR-4x allows you to add new sounds to the internal sound memory area. ➡ **"Adding Expansion Sounds (Exp. Snd)"** (p. 94)
	**FctrySET** You can reset the FR-4x SETs to its factory settings. ➡ **"Restoring the Factory Settings (FctrySET/FctryUPG/FctryALL)"** (p. 95)
	**FctryUPG** You can reset the FR-4x User Program memories to its factory settings. ➡ **"Restoring the Factory Settings (FctrySET/FctryUPG/FctryALL)"** (p. 95)
	**FctryALL** You can reset the FR-4x to its factory settings. ➡ **"Restoring the Factory Settings (FctrySET/FctryUPG/FctryALL)"** (p. 95)
	**Battery** Indicates the remaining battery amount. ADAP, oooo, ooo, oo, o, LOW!!
	**Version** Indicates the version number.
	**Build** Indicates the build number.

Copying a Set to Another Set (Copy SET)

This parameter allows you to copy the settings of one Set to another Set memory

You can copy the common settings of a set together with the sounds and settings of each part included in that set.

NOTE

All settings of the target memory are overwritten.

It might therefore be a good idea to archive the target Set using **"Export"** (p. 94) before proceeding.

1. **Press the [MENU] button.**
2. **Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).**
3. **Use the [◄] [►] buttons to select "Copy SET," and then press the [ENTER/YES] button.**

4. **Use the [◄] [►] buttons to select "From," and select the set number that you want to copy.**

5. Use the [◄] [►] button to select "To," and select the copy-destination set number.

6. Press the [►] button.

A confirmation message appears.

7. Press the [ENTER/YES] button to copy the settings.

A message briefly indicates that data is being written, and then indicates **"Complete"** when copying is complete.

If you decide to cancel, press the **[EXIT/NO]** button.

Copying Settings of a Set to Another Set (Copy EFX)

Here's how the Set Common parameters for Reverb, Chorus, and Drum can be copied to another set.

NOTE

This function does not effect the VTW organ effects.

1. Press the [MENU] button.

2. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

3. Use the [◄] [►] buttons to select "Copy EFX," and then press the [ENTER/YES] button.

4. Use the [◄] [►] buttons to select "Type," and select the type of effect that you want to copy.

Parameter	Value	
Type	Type ALL	All
	Type REV	REV (Reverb)
	Type CHO	CHO (Chorus)
	Type DRUM	DRUM (Drum)

5. Use the [◄] [►] buttons to select "From," and select the set that includes the effect settings you want to copy.

6. Use the [◄] [►] buttons to select "To," and select the copy-destination set.

7. Press the [►] button.

A confirmation message appears.

8. Press the [ENTER/YES] button to copy the settings.

A message briefly indicates that data is being written, and then indicates **"Complete"** when copying is complete.

If you decide to cancel, press the **[EXIT/NO]** button.

Copying the Contents of a Register (Copy REG)

This parameter allows you to copy the settings of one register to another register.

1. Press the [MENU] button.

2. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

3. Use the [◄] [►] buttons to select "Copy REG," and then press the [ENTER/YES] button.

4. Use the [◄] [►] buttons and [–] [+] buttons to select the content to be copied, the copy-source register, and the copy-destination register.

Use the following parameters to specify these items.

Parameter	Explanation/Value	
Type	Select the content to be copied (parameter group).	
	Type ACRD	Accordion
	Type B&C	Bass/Chord
	Type F.BAS	Free Bass
	Type ORCH	Orchestra
	Type ORGN	Organ
	Type O.BAS	Orchestra Bass
	Type OCHD	Orchestra Chord
	Type OF.BS	Orchestra Free Bass

Parameter	Explanation/Value
SET From	Select the copy-source set.  1–100, WA (Working Area Set)
REG From (Register From)	Select the copy-source register (register button) number. **When the Type is Accordion, Orchestra, or Organ** 1–14  **When the Type is Bass/Chord, Free Bass, Orchestra Bass, Orchestra Chord, or Orchestra Free Bass** 1–7
SET To	Select the copy-destination set.  1–100, WA (Working Area Set)
REG To (Register To)	Select the copy-destination register (register button) number. **When the Type is Accordion, Orchestra, or Organ** 1–14  **When the Type is Bass/Chord, Free Bass, Orchestra Bass, Orchestra Chord, or Orchestra Free Bass** 1–7

5. From the REG To screen, press the [►] button again.

A confirmation message appears.

6. Press the [ENTER/YES] button to copy the settings.

A message briefly indicates that data is being written, and then indicates **"Complete"** when copying is complete.

If you decide to cancel, press the **[EXIT/NO]** button.

Simultaneously Editing the Right Hand Accordion Sounds (AccMacro)

This parameter allows you to change the settings of the Right Hand register (Treble) in the current SET.

This may help you save a lot of time, especially for increasing or decreasing the volume of some or all reeds, or for selecting a different noise type.

1. Select the set for which you want to edit the right hand accordion sounds simultaneously.

For details, refer to **"How to Select Sets"** (p. 33).

2. Press the [MENU] button.

3. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

4. Use the [◄] [►] buttons to select "AccMacro," and then press the [ENTER/YES] button.

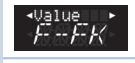
5. Use the [–] [+] buttons to select the type of parameter that you want to edit in common for registers 1–14 of the right hand accordion part.

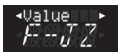
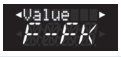
Parameter	Value
Type	 Valve Noise Type
	 Valve Noise Level
	 Musette Detune Type

6. Press the [►] button.

The Value screen appears.

The field **"Value"** changes depending on the **"Type"** of selected parameter. See the following table:

Parameter	Explanation/Value
Value (if "Type" is selected as NOIS) 	It allows you to specify what kind of instrument should generate the noise. **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun
	 Jazz
	 F-Folk
	 D-Folk
	 Organetto
	 F-Folk2
	 Classic2
	 Studio
	 Tradition
	 Steierische
	 OldItaly

Parameter	Explanation/Value	
Value (if "Type" is selected as NOIS) 		TexMex
		Trikitixa
		F-Jazz
		Classic3
		Bajan
Value (if "Type" is selected as N.LV) 	It allows you to specify how prominent the noise should be.	
		Off, –40–Std–+40
Value (if "Type" is selected as MUSE) 	It allows you to choose the system used for detuning the 8' reeds.	
		Off
		Dry
		Classic
		F-Folk
		American_L
		American_H
		North_Europe
		German_L
		D-Folk_L
		Italian_L
		German_H
		Alpine
		Italian_H
		D-Folk_H
		French
		Scottish

7. Use the [–] [+] buttons to set the "Value."

8. From the Value screen, press the [▶] button again.

A confirmation message like the following appears.

9. To save the settings, press the [ENTER/YES] button.

When saving is completed, the screen indicates **"Complete."**

If you decide to cancel, press the **[EXIT/NO]** button.

Simultaneously Editing the Left Hand Accordion Sounds (BasMacro)

Here's how to edit the parameters of the left hand bass & chord part (accordion sounds) of the selected set simultaneously for all registers.

You can simultaneously edit settings such as the reed noise type and volume.

1. Select the set for which you want to edit the left hand bass sounds simultaneously.

For details, refer to **"How to Select Sets"** (p. 33).

2. Press the [MENU] button.

3. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

4. Use the [◄] [►] buttons to select "BasMacro," and then press the [ENTER/YES] button.

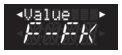
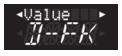
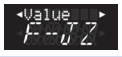
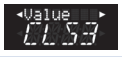
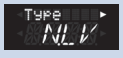
5. Use the [–] [+] buttons to select the type of parameter that you want to edit in common for registers 1–7 of the left hand bass & chord part.

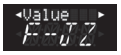
Parameter	Value	
Type		Button Noise Type
		Button Noise Level
		Reed Growl Noise Type
		Reed Growl Noise Level

6. Press the [►] button.

The Value screen appears.

The field **"Value"** changes depending on the **"Type"** of selected parameter. See the following table:

Parameter	Explanation/Value
Value (if "Type" is selected as NOIS) 	It allows you to specify what kind of instrument should generate the noise. **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun
	 Jazz
	 F-Folk
	 D-Folk
	 Organetto
	 F-Folk2
	 Classic2
	 Studio
	 Tradition
	 Steierische
	 Trikitixa
	 F-Jazz
	 Classic3
	 Bajan
Value (if "Type" is selected as N.LV) 	It allows you to specify how prominent the noise should be.
	 Off, –40–Std–+40

Parameter	Explanation/Value
Value (if "Type" is selected as GRWL) 	It allows you to choose the typical instrument noise a bass reed makes just before it stops vibrating altogether. **MEMO** If you've added expansion sounds, you can select types other than those listed here.
	 Bandoneon
	 I-Folk
	 I-Folk2
	 Classic
	 Cajun
	 Jazz
	 F-Folk
	 D-Folk
	 Organetto
	 F-Folk2
	 Classic2
	 Studio
	 Tradition
	 Steierische
	 Trikitixa
	 F-Jazz
	 Classic3
	 Bajan
Value (if "Type" is selected as G.LV) 	It allows you to specify how prominent the reed growl should be.
	 Off, –40–Std–+40

7. Use the [–] [+] buttons to set the "Value."

8. From the Value screen, press the [▶] button again.

A confirmation message appears.

9. To save the settings, press the [ENTER/YES] button.

When saving is completed, the screen indicates **"Complete."**

If you decide to cancel, press the **[EXIT/NO]** button.

Simultaneously Editing the Free Bass Sounds (FBsMacro)

Here's how to edit the parameters of the left hand free bass part of the selected set simultaneously for all registers.

You can edit the reed noise type and volume settings simultaneously.

1. Select the set for which you want to edit the left hand free bass sounds simultaneously.

For details, refer to **"How to Select Sets"** (p. 33).

2. Press the [MENU] button.

3. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

4. Use the [◄] [►] buttons to select "FBsMacro," and then press the [ENTER/YES] button.

5. Use the [–] [+] buttons to select the parameter that you want to edit in common for registers 1–7 of the left hand free bass part.

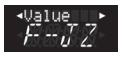
Parameter	Value	
Type	Type NOIS	Button Noise Type
	Type NLV	Button Noise Level
	Type GRWL	Reed Growl Noise Type
	Type GLV	Reed Growl Noise Level

6. Press the [►] button.

The Value screen appears.

The field **"Value"** changes depending on the **"Type"** of selected parameter. See the following table:

Parameter	Explanation/Value	
Value (if "Type" is selected as NOIS) Type NOIS	It allows you to specify what kind of instrument should generate the noise. **MEMO** If you've added expansion sounds, you can select types other than those listed here.	
	Value BAND	Bandoneon
	Value I-FK	I-Folk
	Value IF_2	I-Folk2
	Value CLAS	Classic
	Value CAJN	Cajun
	Value JAZZ	Jazz
	Value F-FK	F-Folk
	Value D-FK	D-Folk
	Value ORGN	Organetto
	Value FF_2	F-Folk2
	Value CLS2	Classic2
	Value STDO	Studio
	Value TRAD	Tradition
	Value STEI	Steierische
	Value TRIK	Trikitixa
	Value F-JZ	F-Jazz
	Value CLS3	Classic3
	Value BAJN	Bajan
Value (if "Type" is selected as N.LV) Type NLV	It allows you to specify how prominent the noise should be.	
	Value STD	Off, –40–Std–+40
Value (if "Type" is selected as GRWL) Type GRWL	It allows you to choose the typical instrument noise a bass reed makes just before it stops vibrating altogether. **MEMO** If you've added expansion sounds, you can select types other than those listed here.	
	Value BAND	Bandoneon
	Value I-FK	I-Folk
	Value IF_2	I-Folk2
	Value CLAS	Classic
	Value CAJN	Cajun
	Value JAZZ	Jazz
	Value F-FK	F-Folk
	Value D-FK	D-Folk
	Value ORGN	Organetto
	Value FF_2	F-Folk2

Parameter	Explanation/Value	
Value (if "Type" is selected as GRWL) 		Classic2
		Studio
		Tradition
		Steierische
		Trikitixa
		F-Jazz
		Classic3
		Bajan
Value (if "Type" is selected as G.LV) 	It allows you to specify how prominent the reed growl should be.	
		Off, –40–Std–+40

7. Use the [–] [+] buttons to set the "Value."

8. From the Value screen, press the [►] button again.

A confirmation message appears.

9. To save the settings, press the [ENTER/YES] button.

When saving is completed, the screen indicates **"Complete."**

If you decide to cancel, press the **[EXIT/NO]** button.

Returning Parameter Values to the Saved State (Restore)

This function allows you to undo all or some changes you made after last saving your settings by reloading the last version you saved. This is called **"restore."** This can be handy when it turns out that your changes don't yield the expected result and that starting all over again would be quicker than changing the parameters back.

NOTE

This function does not necessarily load the factory settings: it loads the settings stored in the selected memory area(s).

1. Press the [MENU] button.

2. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

3. Use the [◄] [►] buttons to select "Restore," and then press the [ENTER/YES] button.

4. Use the [–] [+] buttons to select the parameter whose value you want to restore.

Type	Explanation
ALL 	**ALL** Restores all of the FR-4x settings.
Master Tune 	**M.TUN** (Master Tune) Restores the last **"M. Tuning"** (p. 75) setting you saved.
Scale Tune 	**S.TUN** (Scale Tune) Restores the last **"Scale Tune"** (p. 75) setting you saved.
System 	**SYS** Restores the last **"System"** (p. 72) setting you saved.
MIDI 	**MIDI** Restores the last **"MIDI Parameters"** (p. 82).
All Sets 	**S:ALL** Restores the settings of all Sets and the registers they contain.
Set 1–100 	**S:001–S:100** Restores the settings of the selected Set.

5. Press the [►] button.

A confirmation message appears.

6. To execute restore, press the [ENTER/YES] button.

When restore is completed, the screen indicates **"Complete."**

If you decide to cancel, press the **[EXIT/NO]** button.

Saving a Set or User Program to a USB Flash Drive (Export)

This function allows you to save the SET or User Program data to the connected USB flash drive.

For details, **"Export and Import Sets to/from the Optional USB Flash Drive"** (p. 35), **"Export and Import User Programs to/from the Optional USB Flash Drive"** (p. 40).

Importing a Set or User Program from a USB Flash Drive (Import)

This function allows you to import the settings of a SET and User Program file. You can choose the Set and User Program memory the settings should be loaded to.

For details, **"Export and Import Sets to/from the Optional USB Flash Drive"** (p. 35), **"Export and Import User Programs to/from the Optional USB Flash Drive"** (p. 40).

Adding Expansion Sounds (Exp. Snd)

The FR-4x allows you to add new sounds to the internal sound memory area. The new sounds (files with the **".bin"** extension) must be copied to a USB flash drive, after which you can load them with the FR-4x.

"Loading" means that they will be copied to a permanent internal memory area.

There are four such memory areas (**"A," "B," "C"** and **"D"**).

1. Insert into the FR-4x USB port an optional USB flash drive that contains the expansion to import.

NOTE

- Carefully insert the USB flash drives all the way in—until it is firmly in place.
- Use a commercially available USB flash drive or a USB flash drive sold by Roland. However, we cannot guarantee that all commercially available USB flash drives will work with this unit.
- Never turn off the power or remove the USB flash drives or the power cord while the USB flash drive's access indicator is blinking.

2. Press the [MENU] button.

3. Use the [◂] [▸] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

4. Use the [◂] [▸] buttons to select "Exp. Snd," and then press the [ENTER/YES] button.

Each time you press the **[▸]** button, the type names of the expansion sounds currently loaded into memory areas A–D are shown consecutively.

The example shown below is for when **"VA-SE02: Dallapé Sound Expansion"** is loaded into memory area B.

If no expansion sounds are loaded into a memory area, the indication **"----"** is shown.

5. In the Exp D screen, press the [▸] button again.

6. Use the [–] [+] buttons to specify "Mem Area" (Memory Area).

Select the memory (A–D) into which you want to load an expansion sound, or which you want to erase.

7. Press the [▸] button.

8. Use the [–] [+] buttons to select "Action."

To add sounds, select **"LOAD."**

To erase the data, select **"ERAS"** (Erase).

Load an Expansion Sound

a. Press the [▸] button.

The screen shows the root folder of the USB flash drive.

For details on how to select a folder, refer to **"How to select the folder"** (p. 36).

b. Use the [–] [+] buttons to select the Expansion Sound you want to load.

If the file name does not fit in the screen, it scrolls.

c. Press the [▸] button.

A confirmation message appears.

d. Press the [ENTER/YES] button to load the Expansion

A message is shown for about two minutes while the data is being rewritten; when the process is finished, the screen indicates **"Complete."**

If you decide to cancel, press the **[EXIT/NO]** button.

How to erase an expansion memory "MEMORY AREA"

This procedure allows to delete an internal **"MEMORY AREA."**

a. Press the [►] button.

A confirmation message appears.

b. Press the [ENTER/YES] button to erase the selected memory area.

After a **"Deleting"** message the display will show **"complete."**

If you decide to cancel, press the **[EXIT/NO]** button.

Restoring the Factory Settings (FctrySET/FctryUPG/FctryALL)

The settings that are saved in the FR-4x can be returned to their factory-set state. This is called **"factory reset."**

NOTE

- B&C Mode (p. 73), FBs Mode (p. 73), and TrblMode (p. 74) (button type only) are not initialized by a factory reset.
- Expansion sounds that were loaded by the Exp. Snd function are not initialized even if you execute a factory reset.
- Some of the sets and user programs that are initialized by factory reset use **"Balkan"** and **"Dallapé"** from the expansion sound data.
  In order to play these sets and user programs, you must use the Exp. Snd function to load the **"Balkan"** and **"Dallapé"** expansion sound data respectively.
  ➡ **"Adding Expansion Sounds (Exp. Snd)"** (p. 94)

1. Press the [MENU] button.

2. Use the [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button (p. 44).

3. Use the [◄][►] buttons to select the settings that you want to reset.

Parameter	Explanation
FctrySET	You can reset all of the FR-4x SETs to its factory settings.
FctryUPG	You can reset all of the FR-4x User Program memories to its factory settings
FctryALL	You can reset the entire FR-4x to its factory settings .

4. Press the [ENTER/YES] button.

A confirmation message appears.

5. To reset the SETs press the [ENTER/YES] button.

A message is shown during the factory reset; when it is completed, the screen indicates **"Complete"** and then indicates **"Please OFF."**

If you decide to cancel, press the **[EXIT/NO]** button.

6. Turn the power off, then on again.

Troubleshooting

This section provides an overview of points to check and actions to take when the FR-4x does not function as you expect.
Feel free to contact your Roland dealer if your issue remains unsolved after reading through this section.

Problem	Action	Page
Power turns off on its own.	**When 240 minutes have elapsed since you last played or operated this unit, the power will turn off automatically. (This is the factory setting).** If you don't need the power to turn off automatically, turn the **"Auto Off"** setting **"Off."**	p. 74
Power does not turn on.	**Is the included AC adaptor/power cord correctly connected to an AC outlet and to the FR-4x?** Connect the supplied AC adapter, or install the FR-4x battery pack (sold separately). **NOTE** Do not use any AC adaptor or power cord other than the ones included. Doing so will cause malfunctions.	p. 10
No sound from the FR-4x.	**Did you switch the FR-4x on?** Switch it on.	p. 15
	Could the [VOLUME] knob be turned down? Select a higher setting.	p. 15
	Are you moving the bellows while triggering accordion sounds? The FR-4x only produce sound if you move the bellows while playing notes (like on an acoustic accordion).	—
	If you are using the expression pedal of an external MIDI foot controller (FC-300), could the expression value be set to 0 for the control-destination part? Advance the expression pedal to increase the expression value.	—
	Did you set the "Speakers" to off? Turn it ON or ON.PH (On+Phones).	p. 29
	Could a MIDI message received from an external MIDI device (volume message or exclusive message) have lowered the volume?	—
No sound from a specific part.	**Did you select an extreme "Balance" value?** Select a center position.	p. 16
	Could that part's "Volume" be turned "Off"? Check the **"Volume"** setting of each part.	p. 28 p. 54 p. 56 p. 57 p. 60 p. 64 p. 66
	The part you're trying to play might be muted. Cancel muting (p. 22 for the right hand part, p. 24 for the left hand part).	p. 22 p. 24
Some bass and chord buttons don't play notes.	**Could the "Function Switch" setting "status" be turned on?** If so, switch it off.	p. 76
No sound is heard when an external amplifier is connected.	**It may be that the connection cables are broken, or that your amp or speaker has malfunctioned.** Check the cables and your equipment once again.	—
	Did you connect the audio cables to the correct jacks? Check the connection cables.	—
The volume level of the instrument is too low when it is connected to an amplifier.	**Could you be using a connection cable that contains a resistor?** Use a connection cable that doesn't contain a resistor.	—
The FR-4x does not respond to your playing.	**Did you set the "External Seq. Playback" to "On"?** If this is **"On,"** the FR-4x responds only to MIDI messages that it receives; playing the FR-4x's keyboard does not produce sound. Change the setting to **"Off"** for the appropriate part.	p. 83
Issues related to the bass buttons board.	**Why do the bass buttons only provide three chord rows?** Because you set the **"B&C Mode (Bass & Chord Mode Layout)"** to **"3 bass rows."** Set it to **"2 Bs Rows."**	p. 73
	Why can't I play diminished chords using the bass buttons. Because you set the **"B&C Mode (Bass & Chord Mode Layout)"** to **"3 bass rows."** Set it to **"2 Bs Rows."**	p. 73
	In Free Bass mode, the bass buttons play the wrong notes. You may have changed the **"FBs Mode (Free Bass Mode Layout)"** setting. Be sure to select the system that best suits your playing style.	p. 73

Problem	Action	Page
A "buzz" is heard from the external amplifier.	**Is the external amplifier or other device used with the FR-4x connected to a different AC power outlet?** Connect the amplifier or other device to the same AC outlet as the FR-4x.	—
Unable to select a specific parameter	**Could the part whose parameter you are attempting to edit be turned off?** If the part whose parameter you are attempting to edit is turned off, that parameter cannot be selected (a message appears in the display). Turn on the applicable part, and try again.	p. 21 p. 23
MIDI messages are not transmitted from the FR-4x.	**Could the "MIDI Out/In" be set to "In"?** Set the "MIDI Out/In" to "Out."	p. 82
	Could the global filter be applied? Check the setting as described in "Global Setting."	p. 82
No sound from a connected MIDI device.	**Does the FR-4x's MIDI transmit channel match the MIDI receive channel of the connected external MIDI device?** Set the MIDI transmit channel.	p. 83
MIDI-related issues	**What MIDI channels does the FR-4x use by default?** See the "MIDI channels" table.	p. 12
	The FR-4x does not receive MIDI messages recorded on a computer / The FR-4x does not respond to the performance of an external MIDI device. • Could the "External Seq. Playback" (p. 83) parameter be "Off"? Change the setting to "On." • Could the "MIDI Out/In" parameter be "Out"? Change the "MIDI Out/In" parameter to "In."	p. 83 p. 82
	The external sequencer keeps displaying a "MIDI Buffer Overflow" message. The bellows sends too many data at once (its data are transmitted on many channels simultaneously). Select a different resolution. This leads to a coarser resolution, and maybe to audible steps, but at least, your sequencer will be able to record the data. See "Bellows TX."	p. 85
Unable to read from/write to USB flash drive.	**Are you using a Roland USB flash drive (sole separately)?** Reliable performance cannot be guaranteed if you use non Roland USB flash drive products.	—
	Check the format of your USB flash drive. The FR-4x can use USB flash drive that has been formatted as FAT or FAT32. If your USB flash drive was formatted using any other method, please re-format it.	—
Can't save to USB flash drive.	**Is there sufficient free space on the USB flash drive?**	p. 104
Audio recording won't start or stops unexpectedly.	**Are you using a Roland USB flash drive (sole separately)?** Reliable performance cannot be guaranteed if you use non Roland USB flash drive products.	—
	Is there sufficient free space on the USB flash drive?	p. 104
The song (Audio files) won't to play.	**The file type of the song is not one of the file types that the FR-4x can play.**	p. 37
	It may be that the song data is damaged.	p. 104
The bellows exhibits an erratic behavior.	If the bellows doesn't work as expected, causing notes to sound even while it is not moved, its sensors may need resetting. To do this, follow these steps: **a. Switch off the FR-4x.** **b. Close the bellows pressing the air button.** **NOTE** Be sure to close very well the bellows to purge all air that remain. **c. Press and hold the [◄] and [►] buttons while switching the FR-4x back on.** After a few seconds, the display shows "Complete CALB" and then returns to the main page. **d. Switch off and switch on the FR-4x.** If this operation doesn't solve the problem, contact your Roland dealer.	—

Main Specifications

Roland FR-4x/FR-4xb: V-Accordion

Keyboard, Bass & Bellows	
Right hand (FR-4x only)	37 keys (with velocity sensitivity)
Right hand buttons (FR-4xb only)	92 buttons (with velocity sensitivity)
Left hand	120 bass buttons (with velocity sensitivity)
Treble mode (Left-Hand Keyboard Note Layout) (FR-4xb only)	C Griff Europe, C Griff 2, B Griff Bajan, C Griff Fin, D Griff 1, D Griff 2
Bass & Chord mode (Left-Hand Keyboard Note Layout)	2 Bass Rows, 3 Bass Rows A-7th, 3 Bass Rows A-5dim, 3 Bass Rows B-7th, 3 Bass Rows B-5dim, 3 Bass Rows Bx-7th, 3 Bass Rows Belgium
Free bass mode (Left-Hand Keyboard Note Layout)	Minor 3rd, Bajan, Fifth, North Europe, Finnish
Bellows	High-resolution pressure sensor for the detection of bellows pressure Bellows resistance regulator: wheel with fine adjustment
Bellows curve	Fixed Low, Fixed Med, Fixed High, X-Light, Light, Standard, Heavy, X-Heavy, Close, Open, Tango, Traditional, Jazz, Classic, Dynamic1, Dynamic2

Sound source	
Max polyphony	128 voices
Tones (Accordion Set)	100 Accordion Sets **Each Accordion Set includes** (number of sounds that can be assigned to the register buttons) **Right Hand Registers :** 14 Accordion registers, 14 Orchestra registers, 14 Organ registers **Left Hand Registers :** 7 Bass & Chord registers, 7 Free Bass registers, 7 Orchestra Bass registers, 7 Orchestra Chord registers, 7 Orchestra Free Bass registers
Reed footages	7 Treble, 5 Bass, 3 Chord, 2 Free Bass
Orchestral sounds	162 * Orchestral sounds can also be used with orchestral bass sounds, orchestral chord sounds, and orchestral free bass sounds.
Organ sounds (Virtual Tone Wheel)	32 presets for Treble, Orchestra Chord and Orchestra Free Bass sections 16 presets for Orchestra Bass section

Sound source	
Drum sets	3
User programs	98: 7 User Program Bank x 14 registers

PBM (Physical Behavior Modeling)	
Noises	Stopping-reed growl, Closing valve noise, Left button noise
Individual reed simulation	Hysteresis Threshold, Expression Curve, Pressure-Variant Filter, Pressure-Variant Pitch Deviation
Switching reed sound wave	By bellows acceleration, by note repetition speed
Bellows opening/ closing sound change	By bellows opening/closing detection

Musette Tuning	
Micro-tuning presets	16 Types: Off, Dry, Classic, F-Folk, American L/H, North Europe, German L/H, D-Folk L/H, Alpine, Italian L/H, French, Scottish
Fine tuning reed footages 8- / 8+	-100 to 0 to +100

Effects	
Reverb	8 types * Includes delay type.
Chorus	8 types * Includes delay type.
Rotary for organ sound	Slow/Fast
"Cassotto" simulation	Yes
4 Band EQ for internal speakers	Yes

Panel Controls	
Knob controls & registers	Volume, Balance, Reverb, Chorus, Right hand register buttons 7 x 2 * Use the A/B button to switch between sounds assigned to the register buttons. Left hand register buttons 7
Navigation buttons	Menu/Write, Exit/No, Enter/Yes, Cursor ◄/►, Value -/+ (Set Down/Up)
Other buttons	Right Hand Parts buttons (Accordion, Orchestra, Organ) Left Hand Parts buttons (Drums, Orch Bass, Orch Chrd/F.Bass, F.Bass, Bass&Chrd) User Program, Song List, Play/Pause, Rec, Power
Additional buttons	6 user assignable function switches on last row of bass buttons

Operation mode	
Right hand keyboard mode	Layer (Zone), High, Low

Operation mode	
Octave shift	-3, 0, +3 for Orchestra This setting can be saved individually for each set. -1, 0, +1 for Treble, Orchestra, Organ (Right hand) This setting can be saved individually for each user program.
Orchestra chord guitar mode	Gtr Table1, Gtr Table2, Gtr Table3
Sound edit	Yes * The dedicated editor allows full editing.
Bass to treble	Yes
Part Mute	Accordion, Orchestra, Organ, Bass&Chord, Free Bass, Orch Bass, Orch Chord, Orch Free Bass
Bass & Chord with drum/percussion sounds	Programmable drum/percussion sounds for Bass/Orch Bass rows, Chord/Orchestra Chord rows.
Audio player and audio rec	MP3/WAV file playback from a USB flash drive, WAV file recording to a USB flash drive
Speakers on/off	Yes
Left-hand button keyboard layer	Yes

Other	
Display	Custom LCD (8 characters + 16 segments x 4)
Rated power output	2 x 11 W
Speakers	2 x 10 cm 1 x Tweeter
Wave expansion	4 internal areas (8 MB each) to load new sounds * When shipped from the factory, sounds are pre-installed in two areas.
Power supply	AC adaptor Batteries (AA-type rechargeable Ni-MH x 10) * Expected battery life under continuous use: 5 hours speaker ON mode, 9 hours speaker OFF mode
Current draw	2000 mA
Onboard connectors	OUTPUT jacks L/Mono (Treble), R/Mono (Bass): 1/4" phone type PHONES jack: Stereo 1/4" phone type INPUT jack: Stereo miniature phone type MIDI (IN or OUT) connectors USB MEMORY port USB COMPUTER port (USB Hi-Speed MIDI support) (Use a USB cable and a USB port on your computer that supports Hi-Speed USB.) DC IN jack

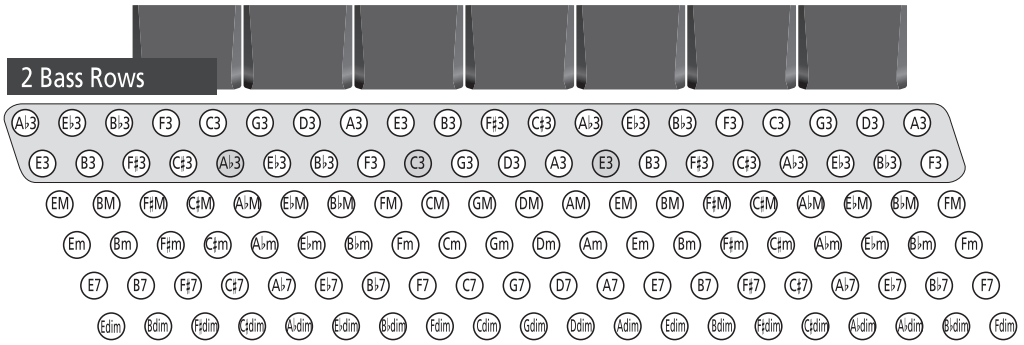
Other	
Dimensions	**FR-4x:** 481 (W) x 270 (D) x 430 (H) mm 18-15/16 (W) x 10-11/16 (D) x 16-15/16 (H) inches **FR-4xb:** 470 (W) x 240 (D) x 390 (H) mm 18-9/16 (W) x 9-1/2 (D) x 15-3/8 (H) inches
Weight (without straps and batteries)	**FR-4x:** 8.9 kg / 19 lbs 10 oz **FR-4xb:** 8.6 kg / 19 lbs
Accessories	AC Adaptor Power cord (for connecting the AC adaptor) Owner's Manual Reference caps for the bass buttons Reference caps for the right hand buttons (FR-4xb only) Straps Accordion cover Attachment strip
Option (sold separately)	USB Flash memory Soft case for accordion (BAG-FR-3) Headphones MIDI foot controller (FC-300)

* This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

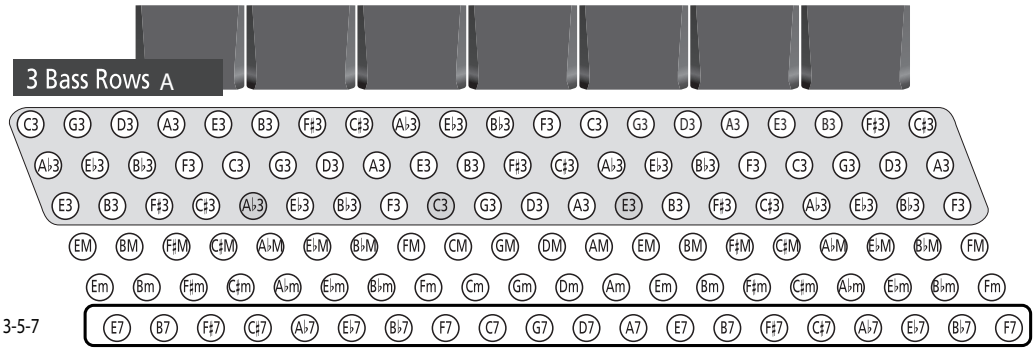
Button Layouts

BASS & CHORD TABLE

2 Bass Rows

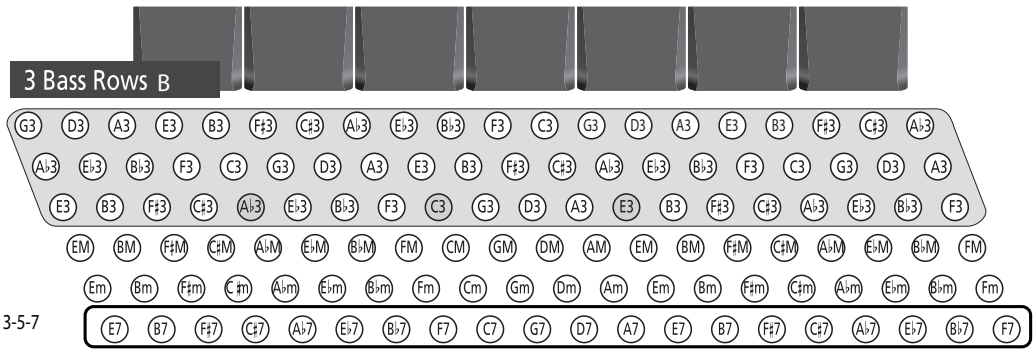


3 Bass Rows A



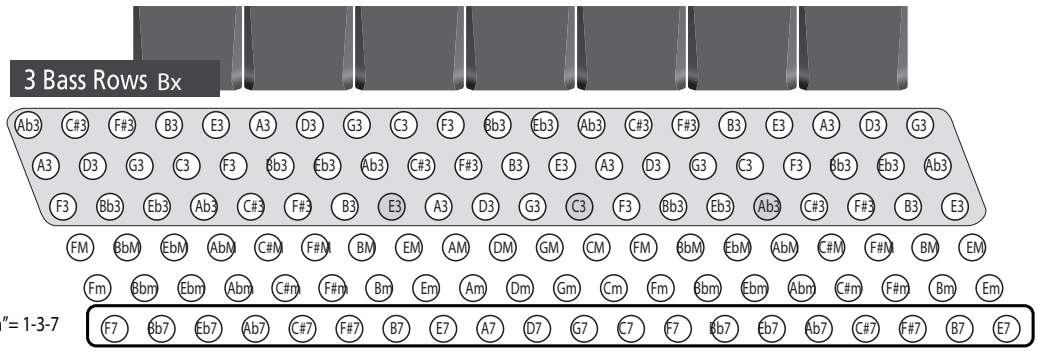
"7th"= 1-3-7; "5dim"= 3-5-7

3 Bass Rows B



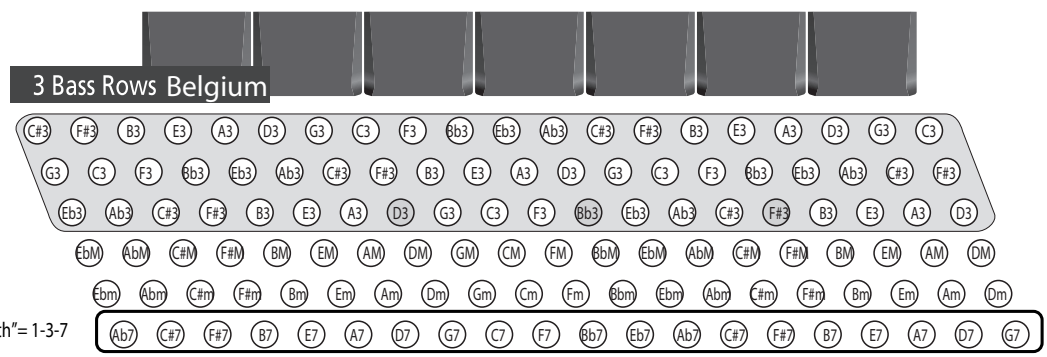
"7th"= 1-3-7; "5dim"= 3-5-7

3 Bass Rows Bx



"7th"= 1-3-7

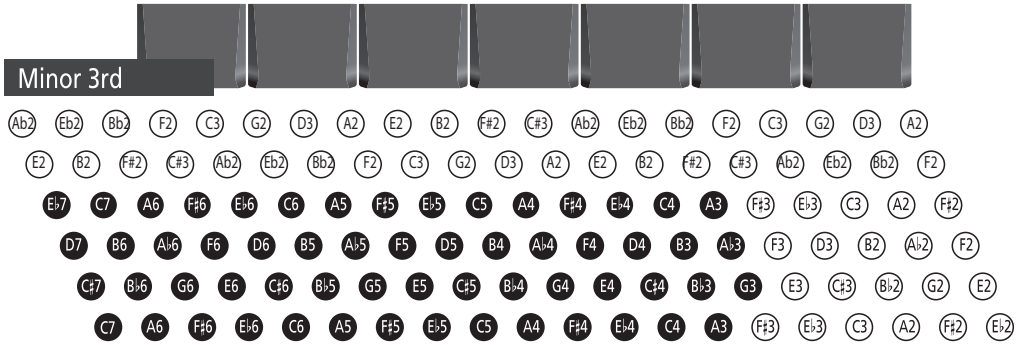
3 Bass Rows Belgium



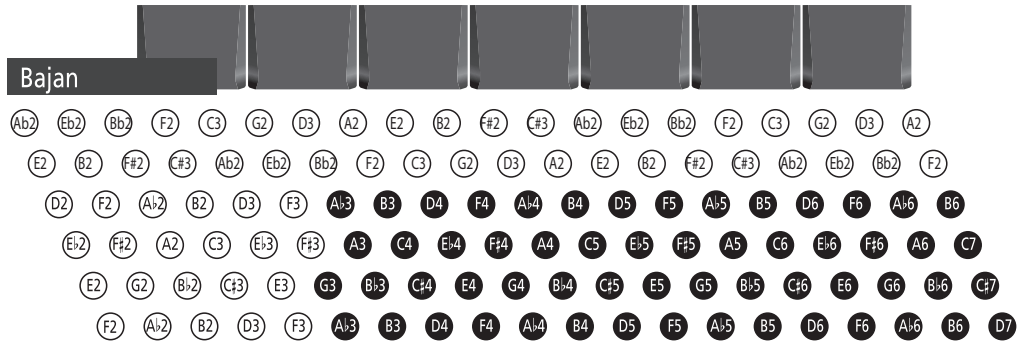
"7th"= 1-3-7

FREE BASS MODE TABLE

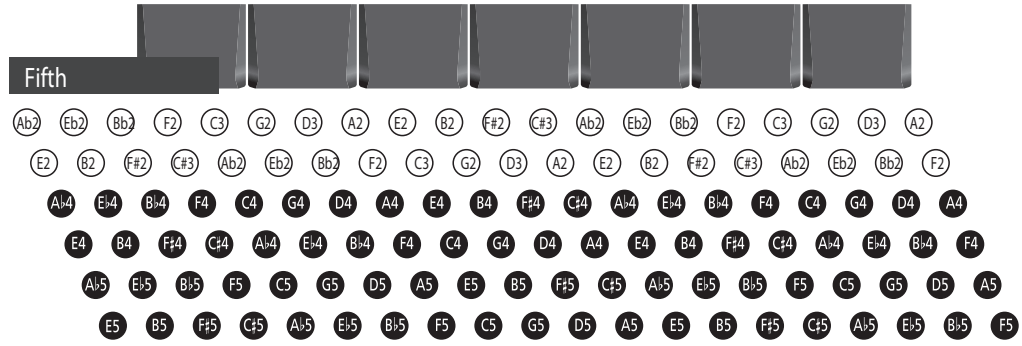
Minor 3rd



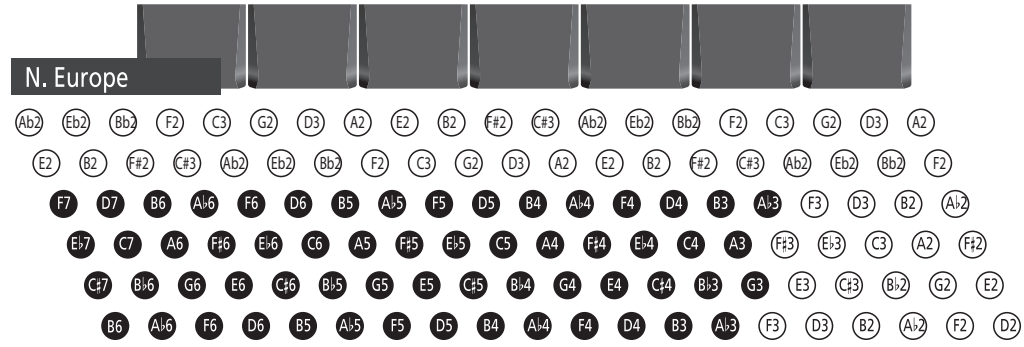
Bajan



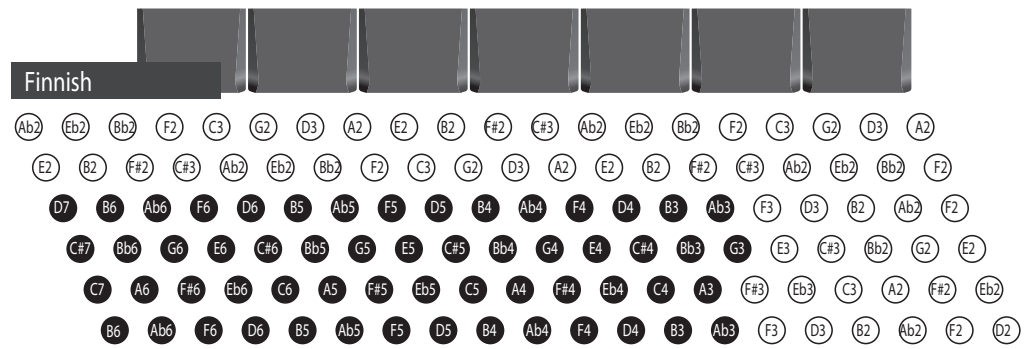
Fifth



N. Europe



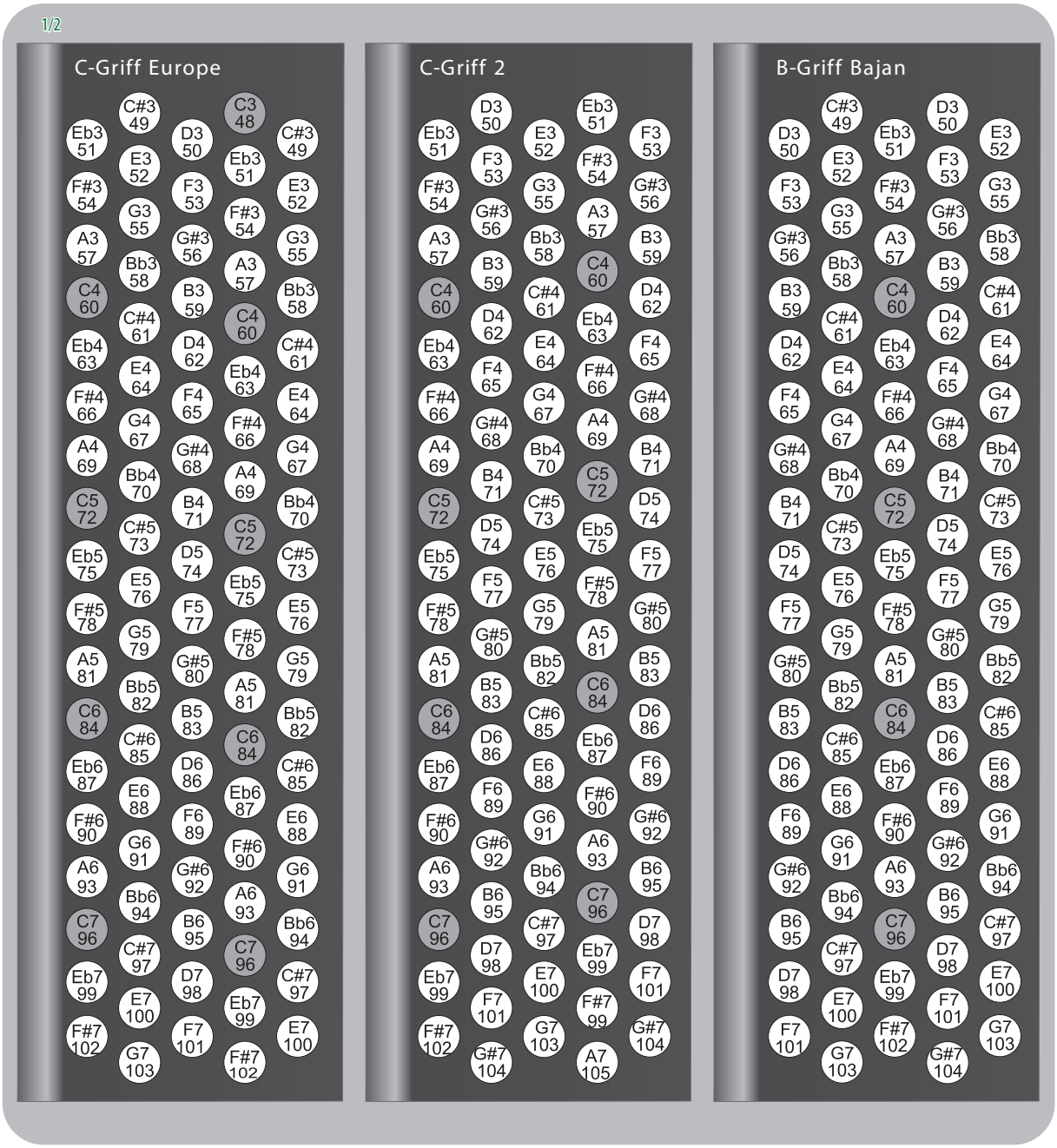
Finnish



Low side: white buttons

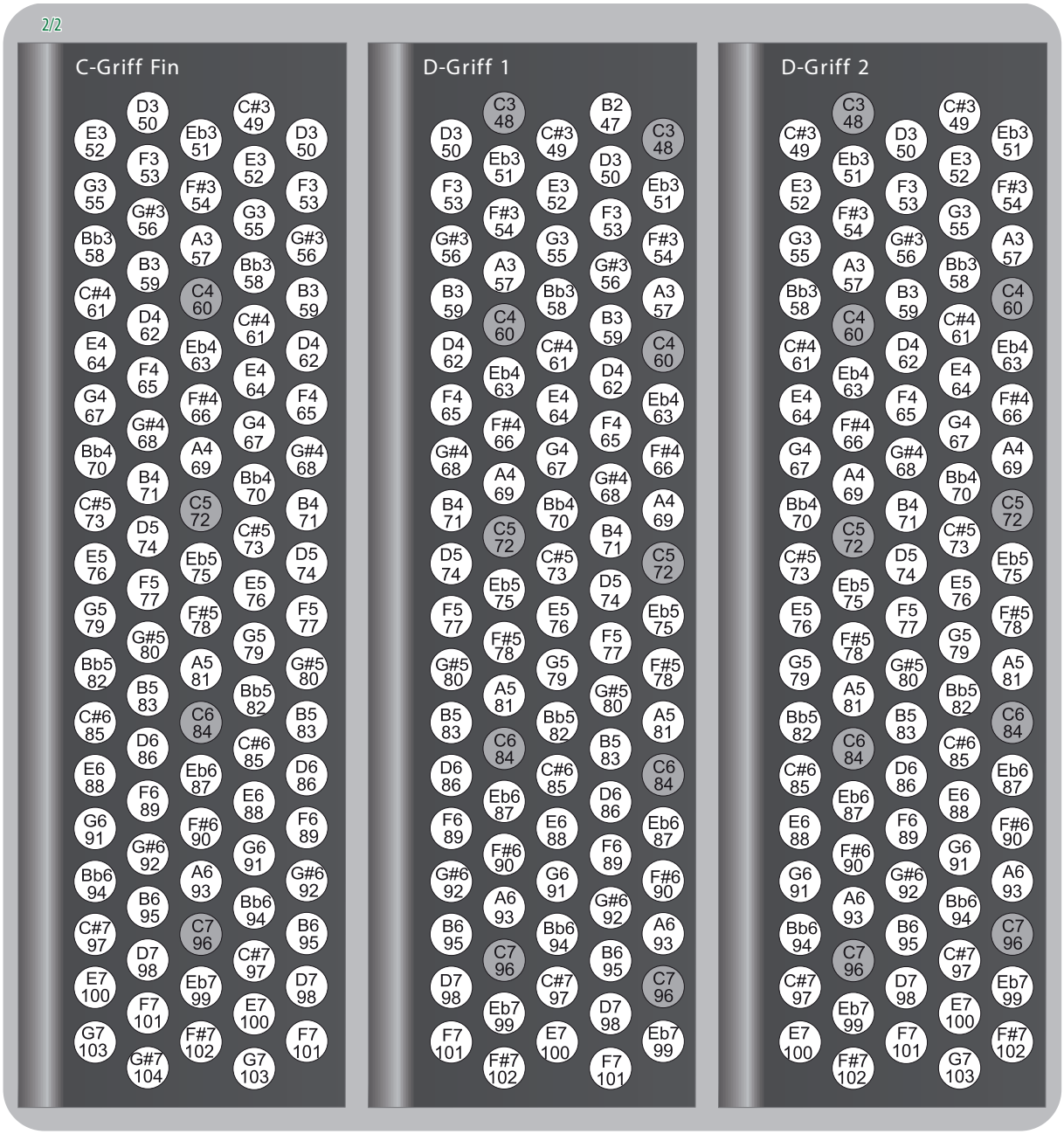
High side: black buttons

TREBLE MODE TABLE



The alphabetical character inside the button is the note name, and the numeral following it indicates the octave.
The numbers below the note names represent the corresponding MIDI note numbers.

TREBLE MODE TABLE



Error Messages

Display	Meaning	Action
	The battery has run down.	Replace the batteries, or use an AC adaptor.
	The expansion sound data you are attempting to load already exists in the FR-4x's internal memory.	
	This expansion sound data file has an invalid format. The file might be damaged.	Do not use this file.
	This file has an invalid format. The file might be damaged.	
	Data cannot be written because the USB flash drive has no more free space.	Delete unneeded files from the USB flash drive. Alternatively, use a different USB flash drive device, one that has more free space available.
	A song cannot be found.	Press the **[SONG LIST]** button and select a song.
	USB flash drive is not connected.	Connect USB flash drive.
	The writing-destination device cannot be found.	
	The file or the USB flash drive itself is write protected.	Make sure that the file or the USB flash drive is not write protected.
	Since the FR-4x is playing, this operation cannot be executed.	Stop playback before you execute the operation.
	Failed to write data.	Please perform it again. If the error persists, please contact your Roland dealer or Roland distributor.
	Failed to write data.	Please perform it again. If the error persists, please contact your Roland dealer or Roland distributor.

List of Shortcut Keys

* **"[A] + [B]"** indicates the operation of **"holding down the [A] button and pressing the [B] button."**

Shortcut	Explanation
[SHIFT] + [1/8]	Lowers the range of the right hand current part's right hand keyboard by one octave.
[SHIFT] + [2/9]	Raises the range of the right hand current part's right hand keyboard by one octave.
[SHIFT] + [3/10]	Turns the sordina effect on/off. (Sordina) On an acoustic accordion this effect is created by a chamber (resonant chest) inside the instrument, but the FR-4x simulates this effect electronically.
[SHIFT] + [4/11]	Allows the bass part to be played from the right hand keyboard. (Bass To Treble)
[SHIFT] + [5/12]	Changes the speaker on/off setting each time the shortcut key is pressed. (Speakers) **"OFF"**: Internal speakers off. **"ON"**: Internal speakers on. However, the speakers turn off if headphones are connected. **"ON:PH (On+Phones)"**: The internal speakers are on even if headphones are connected.
[SHIFT] + [6/13]	Shows the remaining battery amount. (Battery)
[SHIFT] + [7/14]	Shows a screen where you can specify the response to bellows movement. (Bellows Curve Type)
[SHIFT] + [DRUMS]	Shows a screen where you can specify the drum volume. (Drum Level)
[SHIFT] + [ORCH BASS]	Shows a screen where you can specify the volume of the orchestra bass part. (Orchestra Bass Level)
[SHIFT] + [ORCH CHRD/F.BASS]	Shows a screen where you can specify the volume of the orchestra chord part (in free bass mode, the orchestra free bass part). (Orchestra Chord Level/Orchestra Free Bass Level)
[SHIFT] + [ORCHESTRA]	Shows a screen where you can specify the volume of the orchestra part. (Orchestra Level)
[SHIFT] + [ORGAN]	Shows a screen where you can specify the volume of the organ part. (Organ Level)
[SHIFT] + [SONG LIST]	Shows a screen where you can specify the volume of the audio file (WAV/MP3). (Audio File Level)
[SHIFT] + [K]	Lowers all parts by a semitone. (Transpose-)
[SHIFT] + [J]	Raises all parts by a semitone. (Transpose+)
Simultaneously press the Left-Hand Register [1] [2] [3] buttons	If the LEFT HAND **[F.BASS]** button is lit, bass & chord mode is selected. If the LEFT HAND **[BASS&CHRD]** button is lit, free bass mode is selected.
Simultaneously press the Left-Hand Register [3] [4] [5] buttons	In bass & chord mode, this turns the Orchestra Chord part on/off. In free bass mode, this turns the Orchestra Free Bass part on/off.
Simultaneously press the Left-Hand Register [5] [6] [7] buttons	Turns the Orchestra Bass part on/off.